

EVALUATION OF POSTPAYMENT SCREENS
USED BY MEDICARE CARRIERS AND
MEDICAID FISCAL AGENTS

FINAL REPORT

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TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	iii
SECTION 1. STUDY DETAILS.	1-1
1.1 States Visited and Method of Selection. .	1-1
1.2 Investigative Procedure	1-3
1.3 Comparative Findings.	1-3
1.3.1 Screens Employed	1-5
1.3.2 Benefits Derived	1-11
SECTION 2. DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS. .	2-1
2.1 Some Impressionistic Views.	2-1
2.2 Areas/Recommendations for Improvement . .	2-3
2.2.1 Thresholding	2-3
2.2.2 Calculation of Standard Deviations	2-6
2.2.3 Integration of Data Over Time. . .	2-9
2.2.4 Grouping of Procedures	2-10
2.2.5 Documentation.	2-11
2.2.6 Self-Evaluation.	2-12
APPENDIX A. AGENCIES AND PERSONS VISITED.	A-1
APPENDIX B. DATA ELEMENTS AND OTHER RELEVANT SYSTEM FEATURES.	B-1

LIST OF EXHIBITS

	<u>Page</u>
EXHIBIT 1. CARRIERS AND FISCAL AGENTS, BY STATE.	1-2
EXHIBIT 2. CHECKLIST FOR REVIEW OF POSTPAYMENT SCREENING SYSTEMS	1-4
EXHIBIT 3. POSTPAYMENT SCREENING SYSTEMS IN NINE STATES. .	1-6
EXHIBIT 4. EXCEPTION-TYPE REPORTS, CLASSIFIED BY MAJOR VARIABLE OF INTEREST AND METHOD OF SORTING OR COMPARISON	1-9
EXHIBIT 5. INFORMATION FURNISHED BY STATES ON ACTIONS INVOLVING SUSPECTED FRAUD.. . . .	1-14

INTRODUCTION

Since their inception, the Medicare and Medicaid programs have been carefully monitored, in many ways, to guard against possible fraud or abuse. Under the guidance and direction of central and Regional Office personnel, entities which serve as Medicare carriers and Medicaid fiscal agents have instituted a wide variety of safeguards ranging from prepayment review systems which monitor individual claims to postpayment review systems which monitor entire patterns of practice integrated over time.

Prepayment screens are relatively straightforward, involving issues normally easily resolved: patient eligibility, duplicate billing, reasonableness of charge, compatibility of procedure with diagnosis, and so on. Postpayment screens, on the other hand, can be as much an art as a science. They require the careful construction and examination of provider profiles in a manner calculated to distinguish between those guilty of aberrant practice and those who are not. A poorly designed, or implemented, postpayment screening system will except an excessive number of non-aberrant providers, or alternatively, permit a large number of the aberrant to escape detection.

It is the latter set of safeguards -- those applied on a postpayment basis -- which constitute the subject of this study. Section A of the Scope of Work sets the stage:

"...The primary focus of this contract will be to compare the postpayment screens used by contractors who serve as carriers for Medicare and fiscal agents for State Medicaid programs. The purpose of the evaluation is to determine if there are similar standards used for both programs and if not are there approaches used in one program that can be applied effectively to the other program."

Section B of the Scope of Work stipulates that the study shall focus upon physician claims; Section C, as amended, states that it shall be carried out through on-site reviews in a total of eight states.

This report is prepared in two major sections. The first section summarizes the findings of the on-site visits (separately reported in individual state reports), and highlights those screens which are applied in common versus those which are not. Included in this section is whatever quantitative evidence the study team was able to gather concerning the effectiveness of the screens employed.

The second section of this report is devoted to a discussion of those features of the present screening systems which, in one sense or another, are deemed methodologically weak. Issues of system design, application, and documentation are taken up. In each case, positive recommendations are offered for improvement.

Two appendices are included. Appendix A lists the states, agencies, and persons visited. Appendix B identifies the data elements and other salient features of the postpayment screens most commonly used.

This introduction would be incomplete without several acknowledgments. The JWK study team owes a deep debt of gratitude to those individuals, listed in Appendix A, who gave of their time and displayed the utmost of courtesy and patience in responding to the data gathering needs of the project. Thanks are due, too, to Ms. Mildred Tyssowski and other representatives of the Medicare Bureau for their cooperation and participation in the project, and their assistance in the arranging of site visits. Special thanks are extended to Mr. Alan Bradt and Ms. Mary Anne Durham, of the Medicare Bureau Division of Systems, for their participation in several of the field visits and for their efforts in arranging subsequent presentations of the study findings to interested audiences. Finally, sincere thanks are due to the two HCFA project officers -- Mr. Larry Knape, succeeded by Mr. Don Ridley -- for their unflagging guidance and support.

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Largely through the wholehearted commitment and cooperation of those whom it was our pleasure to visit, much was learned in this project concerning the strengths and weaknesses of the various postpayment screening systems currently in operation. JWK hopes that this report will serve as a catalyst in assisting the agencies involved in consolidating those strengths and reducing the weaknesses.

SECTION 1.
STUDY DETAILS

1.1 States Visited and Method of Selection

Soon after contract award, a joint meeting was held between representatives of the Medicare and Medicaid Bureaus, with JWK in attendance, for the purpose of setting in motion the mechanism for the selection of states. There then followed a two-month period during which the carriers and fiscal agents in a number of states, chosen for reasons of geographic diversity, were contacted by HCFA personnel. Most indicated a willingness and readiness to participate in the study, but some did not; the reasons chiefly offered by those who declined were "in the process of phasing into a new system" and "just visited last month," or variants thereof.

On December 14-15, 1977, the JWK study team, accompanied by the HCFA Project Officer, visited the first of the nine scheduled states -- South Carolina.

Subsequent state visits were conducted as follows:

<u>State</u>	<u>Dates Visited</u>
Pennsylvania	January 4-5
Tennessee	January 10-11
Colorado	January 17-18
Iowa	January 30-31
Indiana	February 1-2
Oklahoma	February 8-9
Vermont/New Hampshire*	February 16-17

Exhibit I, on the following page, lists the applicable carriers and fiscal agents in each state.

* New Hampshire was added as a substitute when arrangements to visit another state (Arkansas) fell through at the last moment. The contract was subsequently amended to provide for eight site visits instead of nine. The nine visits covered a total of nine states.

EXHIBIT 1. CARRIERS AND FISCAL AGENTS, BY STATE

	<u>Medicare Part B</u>	<u>Medicaid Physicians Claims</u>
South Carolina	Blue Shield of South Carolina	Same as Medicare
Pennsylvania	Pennsylvania Blue Shield	Pennsylvania Department of Public Welfare
Tennessee	Equitable Life	EDSF
Colorado	Colorado Medical Service, Inc. (Blue Shield)	Same as Medicare
Iowa	Iowa Medical Service (Blue Shield)	Same as Medicare
Indiana	Indiana Blue Shield	Same as Medicare
Oklahoma	Oklahoma DISRS (for beneficiaries who are also Medicaid recipients) Aetna (all others)	Oklahoma Department of Institutions, Social, and Rehabilitative Services (DISRS)
Vermont	New Hampshire-Vermont Physician Service (Blue Shield)	Same as Medicare
New Hampshire	New Hampshire-Vermont Physician Service (Blue Shield)	New Hampshire Department of Public Welfare

1.2 Investigative Procedure

In each state, representatives of both the Medicare carrier and the Medicaid fiscal agent were asked a series of questions relating to:

- a. Screens - The types of postpayment screens employed to identify unusual, possibly aberrant patterns of practice.
- b. Benefits - The extent to which those screens have produced demonstrable results either in the form of after-the-fact recovery, punitive action, or deterrence.

With respect to the first of these issues, the questions asked concerning postpayment screens are shown in Exhibit 2 on the following page, used by the study team as a checklist. System documentation, to the extent available, was also reviewed, both on- and off-site.

With respect to the second issue, the study team asked questions concerning each of the following potential benefits:

- a. The number and dollar volume of overpayments recovered from physicians who were audited as a result of having been "flagged".
- b. The number of such cases referred for further action and their disposition.
- c. The extent to which evidence produced at the postpayment stage has been used to improve prepayment surveillance.

To permit the discernment of trends, and in particular to spot the possible existence of a deterrent effect, data was requested covering a period of at least three years.

1.3 Comparative Findings

In most instances, the information requested by the study team was forthcoming but not always in the form and to the level of detail desired. The

EXHIBIT 2.

CHECKLIST FOR REVIEW OF POSTPAYMENT SCREENING SYSTEMS

1. Types of Screen(s) Employed
 - 1.1 List each computer output summary or other report in which the performance of a single provider is compared against that of his peers.
 - 1.2 For each such output, identify:
 - a. The nature of the peer group against whom the individual is being compared.
 - b. The precise variable or variables which form the basis of comparison.
 - c. The time base involved.
 - d. Is the report routine, by exception, or upon request? Clarify.
2. Decision Criteria
 - 2.1 For each report identified in 1.1, what criteria (if any) are used for judging whether a given data element is an outlier?
 - a. Identify the norm employed. Is it
 - (1) A predetermined "standard" value?
 - (2) The empirical mean of the peer group involved?
 - (3) Something else? (Specify)
 - b. Identify the nature of the maximum deviation permitted. Is it
 - (1) A given percentage of the norm?
 - (2) A given numerical value?
 - (3) A given number of standard deviations?
 - (4) Something else? (Specify)
 - 2.2 Are the criteria identified in 2.1 adjustable?
 - a. Are the adjustments under computer or human control?
 - b. If under human control, who has the authority to make the change and under what conditions?
 - c. If under computer control, describe the adjustment process.
 - 2.3 Are the results of postpayment screening used to initiate modifications in the prepayment screens? If so, describe the process.

problem was not one of willingness to cooperate but rather of format: the data needed was not consistently maintained.

Highlights of the state-by-state findings are presented below.*

1.3.1 Screens Employed

The postpayment screening systems observed in the nine states visited derive from one of four basic sources:

- a. The Surveillance/Utilization Review (SUR) subsystem of MMIS (Medicaid).
- b. The Part B Postpayment Utilization Control System (PPUCS) (Medicare Part B).
- c. The National Association of Blue Shield Plans (NABSP) Post UR System.
- d. The Advanced Medicare System of Electronic Data Systems, Federal (EDSF)

Exhibit 3 identifies the screening system currently employed by the agency responsible for postpayment review in each state. It will be seen that, under the Medicaid program, postpayment review responsibility does not necessarily reside with the fiscal agent; in three of the nine states (South Carolina, Tennessee, and Colorado) that function has been taken over by the state. In each of those three cases, plus Pennsylvania, Iowa and Vermont, the state is currently actively engaged in steps leading to the ultimate implementation of a SUR/MMIS system.

* For additional detail, the reader is referred to the individual state reports.

EXHIBIT 3. POSTPAYMENT SCREENING SYSTEMS IN NINE STATES

STATE	MEDICARE PART B					MEDICAID		
	Postpay Review Performed By	System Used			Postpay Review Performed By	System Used		
		PPUCS	EDSF	NABSP		SUR/MMIS	NABSP	
South Carolina	Blue Shield			X	State*	Planned		
Pennsylvania	Blue Shield		X		State	Planned		
Tennessee	Equitable Life	X			State*	Planned		
Colorado	Blue Shield			X	State*	Planned		
Iowa	Blue Shield		X		Blue Shield	Planned		X
Indiana	Blue Shield		X		Blue Shield	X		
Oklahoma	Aetna (except crossover)	X			State (incl. crossover)	X		
Vermont	Blue Shield			X	Blue Shield	Planned		X
New Hampshire	Blue Shield			X	State	X		

* denotes that the state, although not the fiscal agent, has assumed nominal responsibility for postpayment review.

Although the four basic systems -- PPUCS, EDSF, NABSP, and SUR/MIS -- differ in many respects, they have certain elements in common. A clearer understanding of those commonalities may be reached by reducing the major reports, within each system, to a common taxonomy.. Specifically, the following two-way classification is proposed:

- a. Major variable of interest - There are essentially nine separate variables for which meaningful statistical sorts or comparisons can be made. They are as follows:
 - (1) Number of patients
 - (2) Dollars charged: Total
 - (3) Dollars charged: Per patient
 - (4) Dollars allowed: Total
 - (5) Dollars allowed: Per patient
 - (6) Number of services (or procedures) performed: Total
 - (7) Number of services (or procedures) performed: Per patient
 - (8) Percent of patients who received a given service (or procedure)
 - (9) Percent of patients treated (or seen) for a given diagnosis
- b. Method of sorting or comparison - There are essentially five separate ways in which the foregoing variables can be sorted or compared. They are:
 - (1) By ranking - Under this approach, all providers within a given peer group are ranked according to their order with respect to the variable of interest. The top N providers are then flagged (printed out) for further consideration.
 - (2) By comparison against a predetermined threshold - Under this approach, all providers whose variable of interest exceeds some arbitrary limit (x thousands of dollars or y numbers of procedures) are printed out.
 - (3)-(5) By comparison against a computed threshold - There are several possibilities within this category. Providers can be flagged for further consideration if their variable of interest exceeds
 - (3) The mean + K standard deviations
 - (4) Y percent of the mean
 - (5) The pth percentile

Based on these considerations, exception-type reports (those which seek to identify aberrant practice) may be classified according to where they stand in the 9 X 5 matrix defined by the foregoing taxonomy. NABSP Report No. 10, for example, is designed to flag all physicians who performed a given procedure, within a given type of service, more than K times during the four most recent quarters; that report therefore falls into the 6th row ("total number of services or procedures performed") and 2nd column ("comparison against a predetermined threshold") of the matrix.

In like manner, the remaining exception-type reports within each system may be classified. Exhibit 4 shows the results of that classification, applied to the major report types observed in the field. Although some degree of overlap is seen, by and large each of the systems appears to take a unique tack of its own. For example:

- a. The variables "number of patients" and "percent of patients treated (or seen) for a given diagnosis" are used, for exception purposes, only by SUR (SUR Report No. WF19-01).
- b. The variables "dollars charged per patient" and "percent of patients who received a given service (or procedure)" are used only by PPUCS (Report No. MUT 03).
- c. The remaining five variables are each applied by more than a single system but generally in different ways. The variable "total dollars allowed", for example, is compared by NABSP against a predetermined threshold (part of the PARE process) but is applied by SUR against the mean plus K standard deviations.

A refinement of the SUR system, not shown in Exhibit 4, is its ability to provide statistical comparisons, and identify exceptions based on the age distribution of those treated. In Indiana, statistics were formed for each of four Title 19 age groups: 0-19, 20-40, 41-65, and over 65. Age distinctions

EXHIBIT 4. EXCEPTION-TYPE REPORTS, CLASSIFIED BY MAJOR VARIABLE
OF INTEREST AND METHOD OF SORTING OR COMPARISON

Method of sorting or comparison: Major variable of interest:	Ranking	Comparison Against Predetermined Threshold	Comparison Against Computed Threshold		
			Mean + K S.D.	Y% of Mean	p th Percentile
(1) Number of patients			SUR WF19-01		
(2) Dollars charged (total)		NABSP Type 01	SUR WF19-01		
(3) Dollars charged (per patient)				PPUCS MUTO3	
(4) Dollars allowed (total)		NABSP Type 02	SUR WF19-01		
(5) Dollars allowed (per patient)			SUR WF19-01		EDSF UR 130
(6) Number of services or procedures performed (total)	NABSP Type 17	NABSP Type 10	NABSP Types 03, 05		
(7) Number of services or procedures performed (per patient)			EDSF UR 81	NABSP Type 04, PPUCS MUTO3	EDSF UR 135
(8) Percent of patients who received a given service (or procedure)				PPUCS MUTO3	
(9) Percent of patients treated (or seen) for a given diagnosis			SUR WF19-01		

Note: The system report numbers shown in this exhibit correspond to the
versions currently installed in the following states:

SUR - Indiana
NABSP - South Carolina
PPUCS - Tennessee
EDSF - Pennsylvania

are, of course, of lesser importance for Title 18 applications, which perhaps explains why this feature was observed only in the SUR systems.

Other unique system features are described below:

- a. The EDSF system makes use of a weighting scheme in which all providers who exceed a given threshold are assigned a calculated weight which depends upon (1) the magnitude of the deviation and (2) the number of services performed. Physicians with large deviations and large caseloads thus receive greater weights than those whose deviation and/or caseload is small. This feature, it should be noted, is not used to identify exceptions but rather to rank them once they have been identified. Report No. UR 80A identifies the top 200 providers by weight; Report No. UR 80B identifies the top 200 by excess dollars billed (dollars billed in excess of the peer group norm).*
- b. PPUCS Report No. MUT 05 does something quite similar: it ranks physicians, across specialties, once they have been "excepted" with respect to their peers. Specifically, it ranks providers, within each of sixteen service categories, according to their percentage deviation from the peer group average with respect to any one of the following variables:
 - (1) Percent of patients who received the service in question.
 - (2) Average charge per patient.
 - (3) Ratio of services per patient.

The sixteen defined service categories are as follows:

- Medical services, office
- Medical services, home
- Medical services, hospital
- Medical services, skilled nursing facility
- Medical services, nursing home
- Injections
- Electrocardiograms
- Surgery
- Assistant surgery
- Anesthesia
- Laboratory, office
- Laboratory, inpatient
- Diagnostic X-ray, office
- Diagnostic X-ray, hospital inpatient
- Radiation therapy
- Miscellaneous covered items

* Specific EDSF report numbers vary from state to state, depending upon which version of their system is installed. UR 80A and 80B are applicable to the system used at Pennsylvania Blue Shield.

For readers interested in further detail, Appendix B contains a summary of the individual data elements and other relevant features of the major system reports currently in use in the nine states visited. The information in the appendix has been largely excerpted from the individual state reports.

1.3.2 Benefits Derived

The task of obtaining credible data on the benefits of postpayment screening proved disappointingly elusive. Quantitative evidence had been sought in four specific areas:

- a. Overpayments - How many physicians, suspected of aberrant practice, were subsequently judged to have been overpaid? What was the dollar volume of overpayments identified? Recovered?
- b. Suspected fraud - How many cases were referred to the Office of Program Integrity, the state Investigations Unit, or similar entity, for further action? What was the outcome of those referrals?
- c. Tightened surveillance - To what extent has evidence gathered through postpayment screening resulted in the tightening of prepayment screens? Has such tightened surveillance resulted in charge reductions or denials which would not otherwise have been achieved? What has been the number and dollar volume of such reductions and denials?
- d. Deterrence - Is there any evidence that aberrant practice is on the decline? Can that evidence be linked, in any way, to the postpayment screening process?

Each of these issues is discussed below.

a. Overpayments

Most of the agencies visited reported that their utilization review unit had identified annual overpayments reaching into five and sometimes six figures. There is a great risk, however, in relying upon those numbers, and in particular, using them to judge which screening systems (or states) are more effective than others. This caveat is offered for several reasons:

- (1) Each year, more cases are "excepted" than any given carrier or fiscal agent has time to investigate. The dollar volume of overpayments recovered is therefore more a function of the size of the investigative staff, and its judgment in setting priorities, than it is of the efficiency of the screens themselves.*
- (2) A second factor which makes the straightforward comparison of recovery amounts meaningless is the impact of prepayment review. A carrier or fiscal agent may appear to be less effective in recovering overpayments, on a postpayment basis, simply because it was more effective at the front end.

The chief reason, however, for discouraging cross-state (and cross-program) comparisons based on postpayment recovery data is this: the measure of system effectiveness is not the size of the payoff it produces but rather the size of that payoff compared to what could have been accomplished. A state in which fraud and abuse are rampant may recover more in overpayments, yet be less effective, than one in which such transgressions are rare and the recovery rate low.

Within a given state, however, information concerning overpayments may be used to judge the relative effectiveness of the various screens employed. If physicians flagged by screen A consistently are revealed, upon subsequent audit, to have been overpaid while those flagged by screen B are not, one might legitimately conclude that screen A is the more effective of the two. Unfortunately, data of this type is not currently being kept; none of the states visited maintains records as to which screens were responsible for identifying high yield situations. This information gap will be discussed at greater length in the section on Conclusions and Recommendations.

* In 1977, for example, the Pennsylvania Department of Public Welfare set as its highest priority the investigation of podiatrists. As a consequence, the recovery from podiatrists in 1977 was \$128,079, as against \$150 the year before. The screens hadn't changed but the target had!

b. Suspected Fraud

Every agency visited had something to say on this issue, some more than others. In some cases, the information was based on recollection; in others, it was based on recorded data. Exhibit 5, on the following page, synthesizes the information furnished.

Several persons noted that once a case has been referred by them (to PI, to the state, etc.), they seldom are notified of the outcome. Without commenting on the validity of this complaint, there does seem to be an absence of any formal mechanism for providing referring agencies with periodic status reports on the cases they have initiated.

As in the case of overpayments, no systematic attempt has been made to link those convicted of fraud with the specific screen or set of screens by which they had been flagged.

c. Tightened Surveillance

All agencies maintain a list - sometimes called a "Watch Doctor" list - of physicians suspected of aberrant practice. Depending upon the nature of that suspicion with respect to a given physician, all or a selected subgroup of that physician's claims (those involving injections, for example) are automatically suspended at intake. This process has resulted in reductions and denials of charges which might otherwise have passed the usual screens.

To the extent that the physicians on this list were placed there as a consequence of postpayment screening activity, this too is a benefit relevant to

EXHIBIT 5. INFORMATION FURNISHED BY STATES
ON ACTIONS INVOLVING SUSPECTED FRAUD

STATE	ACTIONS REPORTED TO HAVE BEEN TAKEN	
	MEDICARE	MEDICAID
South Carolina	1975: Two physicians referred to Region IV PI for fraud, one arraigned by federal jury, and three referred to State Peer Review Committee.	1977: Two providers (1 physician, 1 dentist) convicted of fraud, one dentist indicted, seven other providers (4 physicians, 3 dentists) still under investigation.
Pennsylvania	As of December 1976, 38 convictions, 4 acquittals, 19 declinations by U.S. Attorney, 4 pending. Total judgments in civil actions exceed \$2.8 million.	Since 1972, 22 providers (including pharmac laboratories, dentists, etc.) stripped of license, 13 suspended, and 22 given probationary warning.
Tennessee	Since 1966, two physicians convicted of fraud. Currently over 200 cases referred by carrier pending with Program Integrity.	About a dozen investigations each year involving physicians. Several cases currently under investigation with possible large payoffs.
Colorado	Since July 1976, eight indictments, one conviction, several administrative sanctions.	Since July 1976, 15 of the 34 cases received for investigation have been resolved: \$56,000 collected.
Iowa	Since program inception, three indictments, no convictions. No indictments in last three years.	About four providers (3 pharmacists, 1 physician) investigated last year. One pharmacist indicted; received suspended sentence and fine.
Indiana	In 1977, three providers referred to PI.	Several cases under investigation, chiefly pharmacists. One speech therapist convicted on eight counts of forgery; \$96,000 collected
Oklahoma	Several referrals to PI. No indictments or convictions to date.	Information not available.
Vermont/ New Hampshire	One indictment, no convictions to date (physician died before case could be brought to trial).	Of 21 cases investigated in 1977, 2 indicated high potential for fraud, 1 resulted in recovery action, 6 are still pending. Remaining 12 were cleared.

the present study. Many of the agencies visited estimated that at least half of their Watch Doctors had indeed been placed there through postpayment review; only in Indiana, however, was an accurate record of this distinction maintained (see below).

		<u>Total Number of Flagged Providers (Indiana Blue Shield)</u>	<u>Number Initially Identified Through Postpayment Audit</u>
Medicare Part B:	1975	98	65
	1976	94	65
	1977	130	98
Medicaid Non - Institutional	1975	68	46
	1976	50	35
	1977	53	29

The total dollar volume denied through tightened prepayment surveillance can be substantial (about \$25,000 a year for each of Titles 18 and 19 in Indiana) but there is no way of knowing how much of this amount would have been recovered in any event through the use of the normal prepayment screens. Carrier and fiscal agent personnel involved in this activity, however, seemed to be quite convinced that it is a useful mechanism for guarding against being twice burned.

d. Deterrence

Perhaps the single most important benefit accrued through postpayment screening is the one hardest to quantify--that of deterrence. In the absence of a controlled experiment, it is impossible to judge the extent to which fraud and abuse might have existed had there been no postpayment screening system in effect.

If the overpayments identified each year had been declining, while the screens themselves remained no less efficient, one might be willing to conjecture that something akin to deterrence was indeed taking place. Unfortunately, this has not been the case; in state after state - with one exception - the number of dollars recovered through identification of overpayments has been steadily climbing.* A steady increase in overpayments, however, does not necessarily denote that fraud and abuse have become more rampant; more than likely, it simply reflects some combination of (i) inflation and (ii) increased efficiency on the part of the postpayment review group.

It might be noted that, in one state, anecdotal evidence was offered which would point to the existence of deterrence: several providers had taken note of punitive action meted out to others and had voluntarily returned overpayments which had not yet been identified!

* The one exception is Iowa. In that state, despite no apparent reduction in vigilance, Medicare Watch Doctor and postpayment savings and Medicaid prepayment savings showed substantial declines between 1976 and 1977, a sign that deterrence may have taken effect.

SECTION 2.

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

2.1 Some Impressionistic Views

Because of the non-scientific manner in which the nine sample states were selected, it would clearly be inappropriate to assume that the findings reported in the preceding section are necessarily characteristic of the nation as a whole. Nonetheless, several general impressions were gathered which were sufficiently compelling in intensity and uniform across states to warrant mentioning. Those impressions are briefly described below.

- a. By and large, the personnel assigned to the postpayment review process do not fully understand the screening mechanisms employed.

Many of the statistical reports generated for review by carrier and/or fiscal agent personnel are quite complex. The JWK study team found that most postpayment review personnel were insufficiently aware of those complexities to be able properly to explain them. Column headings and line items were often misinterpreted; faulty explanations were offered as to the manner in which peer group averages and thresholds were calculated; and there was a general fuzziness as to the numerical value of many of the decision parameters employed. While this observation is not intended as a blanket criticism - since there were several notable exceptions - it was sufficiently prevalent to constitute a real source of concern.

Is this state of affairs necessarily a problem? Is it essential that review personnel understand the sophisticated process placed in their hands? We think it is. In the absence of such understanding, decision parameters which should be changed go unchanged, statistical comparisons which are meaningless continue to be made, while reams of computer output continue to be generated but are less than fully absorbed, understood, or applied.

- b. Perhaps the greatest barrier to a fuller understanding of the screening process lies in the system documentation. Those who document the system do not write at the level of those who implement it, creating a mismatch which results in misunderstanding.

The gaps in understanding on the part of postpayment review personnel are hardly their fault. Most have strong backgrounds in claims review, including determinations of medical necessity, but they are not systems analysts. Notwithstanding, the documentation to which they have access is written, presumably, by software specialists accustomed to dealing with other software specialists. As a consequence, the system documentation is replete with esoteric terminology and brief, shortcut references where there should be lengthy explanations. And where there are lengthy explanations, they are often too convoluted for the average layman to understand.

- c. Partly as a consequence of this absence of full understanding, the screening systems observed in practice are being applied in less than optimal fashion: they are being used to produce names rather than to screen.

An optimal screening system is one which identifies the greatest number of truly aberrant providers while maintaining a constant false alarm rate (exceptions which are spurious). As applied, however, the screening systems currently in operation are frequently used not as screens but as a device for presenting UR personnel with computer-produced lists of names. Those lists are then "eyeballed" to eliminate cases clearly not worth pursuing, and ultimately, to reduce the number of cases eventually investigated to a level which the available staff can handle.

While there is nothing wrong with matching the investigative caseload to the size of the audit staff, one would hope for a stronger feeling of confidence that the cases ultimately looked into are the ones most likely to be productive -- to result in a finding of aberrant practice. That feeling is lacking, both because of the problems in documentation and understanding referred to on the preceding page, and because the systems themselves contain certain features regarded as methodologically flawed.

Those flaws are discussed in the subsection which follows, and a series of recommendations offered for improvements to existing system design, application, and documentation.

2.2 Areas/Recommendations for Improvement

2.2.1 Thresholding

As noted previously (page 1-7), thresholds are being used in a variety of ways to identify aberrant practice. Those ways, and the numerical thresholds typically associated with each, are briefly recapitulated below:

- a. Prescribed number of standard deviations from the mean - This approach is typified by Report No. 05 of the National Association of Blue Shield Plans' Post-UR System, in which physicians are flagged if their number of services performed, of a given type and procedure, exceeds the average value for their peer group by more than some threshold number of standard deviations. In one of the states visited, that number was 2.0; in another, it was 1.7. In other states, using similar systems, similar practices and thresholds were observed.
- b. Prescribed multiple of the mean - This approach is typified by Report No. 04 of the NABSP Post-UR System. In that report, physicians are flagged if their ratio of services per patient (again, for a given type of service and procedure) exceeds some multiple of the average value for their peers. The multiple generally observed in connection with the NABSP System was 200%; in one case involving the Part B Post Utilization Control System, a threshold of 125% was used.
- c. Prescribed rank order - This approach is typified by Report No. MUT 05 of the Part B PUC System. That report simply identifies the top n utilizers of a given service, measured in terms of their percentage deviation from their peer group average. Reports of a similar (i.e., rank order) nature were employed in all of the states visited; values of n ranged from 25 to 200.
- d. Prescribed percentile rank - This approach is typified by Report No. 135 of the EDSF Advanced Medical System. In that report, physicians are flagged if their ratio of services per patient falls within the top x% (generally ten to twenty percent) of their peer group.
- e. Prescribed numerical limit - This approach is typified by Report No. 10 of the NABSP Post-UR System. In that report, physicians are flagged if they performed more than y services of a given type during the preceding four quarters. The choice of y depends, naturally, upon the procedure in question: office visits command a higher threshold than inpatient visits, and so on.

No one of these methods is necessarily "better" than any other. The use of the mean plus K standard deviations makes sense, perhaps, when

there is reason to believe the underlying distribution might be approximately normal but case after case was seen in which this could not possibly be so.

EXAMPLE: In one instance, the average number of patients seen for a particular diagnosis by physicians of a particular specialty was 65.3 with a standard deviation of 97.1. No self-respecting normal distribution (of a non-negative variable) would ever permit the standard deviation to exceed the mean! In this case, the use of 1.7 or 2.0 or any other number of standard deviations is absolutely uninterpretable.

In practice, what some UR personnel do is experiment with different numerical thresholds in order to see what "falls out." That threshold which yields a tractably small number of exceptions (i.e., small enough to deal with) is ultimately adopted, but again with no assurance that the cases identified are the ones most suitable to pursue.

The answer -- and our recommendation -- is to take advantage of that system feature which causes the underlying frequency distribution to be printed out. Advance examination of the data will permit the reviewer to apply a threshold which can be justified rather than one which is arbitrary.

EXAMPLE: Consider a thresholding process which excepts all cases exceeding the 95th percentile. Two such hypothetical situations are shown below (in each case, the shaded areas represent those cases which exceed the 95th percentile).

Situation A



Situation B



In Situation A, only about half of the cases excepted are actually worth investigating. In Situation B, only about half of the cases worth investigating are actually identified. In each instance, the use of an arbitrary percentile cutoff -- rather than informed individual judgment -- results in a less than optimal allocation of resources.

A second example, taken from an actual state report, is given below:

EXAMPLE 2: Of the seven physicians who in a given quarter formed a particular peer group, the average number of services (of a given type) per patient were reported to be as follows:

Physician A	- 0.06
"	B - 0.12
"	C - 0.18
"	D - 0.33
"	E - 1.00
"	F - 1.18
"	G - 1.40

The computer program which monitored this situation calculated a mean of 0.61 and a standard deviation of 0.56. The threshold (mean plus two standard deviations) was therefore set at 1.73.

The outcome of these calculations was to rule all seven physicians as "well within limits", when the truth of the matter is that three of the seven -- E, F, and G -- might well warrant closer scrutiny. Instead, by creating an unusually large standard deviation, those three guaranteed an extremely wide threshold which they could not help but meet!

Normally, of course, the inspection of empirical data, prior to defining a decision parameter designed to operate upon that data, is frowned upon. In this instance, however, the benefits of prior inspection -- to see which cases are truly outliers -- outweigh the risks.

Our recommendation, then, is this:

RECOMMENDATION NO. 1 - In establishing numerical thresholds, utilization review personnel should be encouraged to obtain a prior "feel" for the data by calling for a printout of the applicable frequency distribution.

The SUR report format shown on page B-18 typifies this approach. As noted on that page, frequency distributions are produced only "if requested by the user." All computerized screening systems should have such a capability; if they do not, they should be modified. The use of plotters, to provide graphic as well as tabular output, would also be helpful. Properly handled, this feature would provide review personnel with needed insight as to which variables are unimodal and which are bi- or polymodal, which are approximately normally distributed and which are not, which are essentially continuous and which contain wide gaps, etc. Skillfully applied, this information would permit more rational, defensible judgments than at present.

2.2.2 Calculation of Standard Deviations

One of the issues alluded to earlier is that of patient volume. Each of the systems reviewed in this study implicitly recognizes that physicians whose caseloads are small are of lesser interest than those whose caseloads are large. That recognition shows up in several ways: EDSF uses caseload as a weighting factor in ranking the severity of deviations; other systems impose minimum cutoffs for number of cases handled or dollars charged (anything below that cutoff is ignored).

Neither of these approaches faces the problem squarely. The patients seen by a physician in a given quarter are in effect a "sample", and as with any sample, its size affects the variability of the data; i.e., physicians whose caseloads are small are more likely to show wide departures from the mean than those whose caseloads are larger. It is inappropriate, therefore, to assign the same threshold to all physicians regardless of caseload.

For variables involving numbers of services or procedures per patient, the only circumstances in which assigning a common standard deviation to all physicians could possibly be correct are those in which each physician treats all of his or her patients identically! If there is any possibility of patient-to-patient variation, then the physician who handles more patients should be judged more severely -- should have a lower threshold -- than the one who handles few. This should not be done (as EDSF does) as part of the weighting process but up front -- in deciding who to weight.

The type of model considered appropriate here involves the following suppositions:

SUPPOSITION 1: All physicians are not alike; there tend to be certain legitimate variations in practice.

SUPPOSITION 2: Each physician may be described by a set of variables ($V_1, V_2, \dots, V_K$) which uniquely characterize his or her practice.

SUPPOSITION 3: For any given physician, the set of variables (V_i) cannot be known with exactitude; all that can be known are sample values based on that individual's most recent practice.

Based on these suppositions, judgments concerning which physicians are following deviant patterns may be reached via the following two-step process:

- a. The first step is to establish for each variable, V_i , an upper and a lower limit which define what is meant by "legitimate variations in practice" (Supposition 1). These values might be based on expert judgment, they might be defined as the mean plus and minus some number of standard deviations or percent, but however defined, they are not to be regarded as thresholds for exception purposes. They simply define what is meant by acceptable.
- b. The second step is to test each sample value which falls beyond these limits for the possibility that it might simply be a chance departure (Supposition 3) from a "true" value (Supposition 2) which is in truth acceptable.

EXAMPLE: Consider the variable "percentage of patients treated for mental disorders (ICDA codes 290-315) by physicians whose specialty is internal medicine." According to the latest National Ambulatory Medical Care Survey,* the nationwide average for this variable is 3.6%, i.e., 3.6% of all office visits to internists involve diagnoses within that ICDA range. Suppose it were decided, based on that evidence plus perhaps some additional research, to set the limits of acceptability for this variable at 1.8% (lower) and 5.4% (upper).

Consider now Internist A with 1,000 Medicaid patients, 70 of whom were treated for mental disorders, and Internist B with 100 Medicaid patients of whom 8 were treated for mental disorders. From a sheer percentage standpoint, Internist B lies farther from the mean than A, with a sample value of 8.0 percent as opposed to A's 7.0. When tested statistically, however, we find that under the null hypothesis which says that the "true" values of both physicians are no greater than 5.4%, the standard deviations for A and B respectively are:

$$\begin{aligned}
 \text{Internist A: } s &= \sqrt{np(1-p)} && (\text{i.e., a binomial distribution}) \\
 &= \sqrt{(1000)(.054)(.946)} \\
 &= \sqrt{51.084} = 7.15
 \end{aligned}$$

$$\begin{aligned}
 \text{Internist B: } s &= \sqrt{(100)(.054)(.946)} \\
 &= \sqrt{5.1084} = 2.26
 \end{aligned}$$

* National Center for Health Statistics, "Office Visits to Internists, National Ambulatory Medical Care Survey, 1975," February 7, 1978.

Since A's sample value (70) differs from his expected value (54) by more than two standard deviations ($16 + 7.15 = 2.25$), his performance may legitimately be deemed suspect. This is not the case, however, for Internist B, whose sample value (8) differs from her expected value (5.4) by well less than two standard deviations ($2.6 + 2.26 = 1.15$).^{*} Internist A is therefore excepted while B is not.

Following through on this point, our second recommendation is as follows:

RECOMMENDATION NO. 2 - Developers of postpayment screening systems should be encouraged to recognize that the standard deviation of most (if not all) practice variables depends upon the number of patients seen. The thresholds applicable to a given physician should therefore depend upon that physician's caseload.

2.2.3 Integration of Data Over Time

In the screening systems observed, data is generally presented for each of the past five quarters, with no attempt to integrate the quarterly data into a single composite by forming moving averages (or sums).

If, as suggested in the preceding discussion, sample size is made a factor in the determination of significance, it becomes increasingly advantageous to use the largest legitimate sample size available; precision increases (and the standard deviation decreases) with the square root of sample size.

Combining data from the last four quarters is strongly suggested (since it avoids the seasonal factor involved in combining five quarters). Note that a quadrupling of the sample size for Internist B (in the example given

^{*} Purists reading this section are certain to note that these computations have ignored the standard 0.5 correction factor for discontinuity. This was done deliberately, of course, to simplify an already overcomplex discussion. Please note, however, that introducing the correction factor would not in any way disturb the conclusions.

earlier) would have halved the standard error and thus resulted in a finding of significance which could not be justified based on the evidence of one quarter alone.

RECOMMENDATION NO. 3 - Postpayment screening systems should incorporate features which integrate data over time so as to increase the precision of the estimates reached and the power of the statistical tests performed. (Note: This is not to say that quarterly comparisons should be abandoned - merely that they should be supplemented by twelve-month totals or moving averages wherever possible.)

Another respect in which the integration of data over time is encouraged is in connection with the information routinely derived through prepayment screening. No structured attempts by carriers or fiscal agents were observed toward maintaining a count of the number of times a given physician was involved in reduced or denied claims, nor the total dollar volume of reductions and denials involving that particular physician. If done at all, this information is currently developed informally and depends more on the alertness of review personnel than upon a systematic data gathering process.

RECOMMENDATION NO. 4 - Postpayment screening systems should include an additional screen in which physicians are compared with their peers according to (a) the percentage of claims reduced or denied at the prepayment stage and (b) the average dollar reduction or denial per claim submitted.

2.2.4 Grouping of Procedures

One of the comments received in the field dealt with a physician who was "felt" to be engaged in abusive if not fraudulent practice. The situation involved what was believed to be an excessive number of mastectomies. Yet, following the service categories defined in the software, all surgical procedures were treated as a single category; a mastectomy was thus

indistinguishable from (counted no more than) a biopsy. As a consequence, the physician in question consistently avoided being excepted.

Three options were suggested to the individual who raised the point:

- a. Define mastectomy as a separate service category and see what happens.
- b. To avoid the necessity for generating separate reports for individual surgical procedures, simply divide all of surgery into three categories expensive, less expensive, and least expensive.
- c. Alternatively, compare physicians with their peers based on dollars per patient rather than services per patient.

This anecdote illustrates the pitfalls which can arise when expensive and inexpensive procedures are combined into a single category. It also points up the flexibility available with existing systems, but often inadequately taken advantage of.

RECOMMENDATION NO. 5 - Existing system features which call for combining expensive and inexpensive procedures into a single category should be modified; service and/or procedure categories used for exception purposes should be as homogeneous (with respect to cost) as possible.

RECOMMENDATION NO. 6 - Consideration should be given to the feasibility of initiating a program of technical assistance to enhance the skills of postpayment review personnel and to encourage the taking of local initiative.

2.2.5 Documentation

The following recommendation is offered without further comment:

RECOMMENDATION NO. 7 - Documentation made available to postpayment review personnel should be improved, in terms of its clarity, lucidity, and applicability.

2.2.6 Self-Evaluation

The recommendations presented on the preceding pages are offered in the hope that they may serve to strengthen what are considered to be existing deficiencies in the design, documentation, and application of postpayment screening systems.

Still unanswered, however, is the question: Exactly how "good" are these systems? Are they providing benefits at least commensurate with their cost?

As noted earlier (pp. 1-11 through 16), the information needed to answer these questions simply does not exist. While carriers and fiscal agents may produce recovery figures in the tens and hundreds of thousands, no one seems to know how much of that recovery is attributable to the screening process, i.e., to the examination of physician profiles for signs of aberrance. Considering the large sums of money invested in these systems, it becomes reasonable to ask: Are all of these statistical trappings really necessary, or might not a more rudimentary system accomplish essentially the same purpose?

EXAMPLE: States A and B, with equal claims volumes, investigative caseloads, and numbers of physicians, report recovery figures (resulting from audits triggered by postpayment screening reports) of \$100,000 and \$200,000 respectively. On the surface, therefore, State B would appear to be running the more efficient screening operation.

Suppose, however, that during the year in question, both states had instead selected physicians for audit on a strictly random basis. Suppose, further, that this modified process would have resulted in the recovery figures shown below:

State A - \$ 50,000 (instead of \$100,000)

State B - \$180,000 (instead of \$200,000)

Unless there are other explanations equally or more plausible, one might now be willing to conjecture that the screens used in State A were actually more efficient than those used in B! The State A screens took a situation in which the recovery would normally have been small and by focusing upon those providers whose profiles seem most aberrant, doubled

the amount actually recovered. In State B, on the other hand, screening based on profile analysis added relatively little to what could have been accomplished, nearly as well, through a simple random sample. 1/

To the extent that situations such as this exist, they serve to reinforce the statement made earlier in this report (page 1-12):

(T)he measure of system effectiveness is not the size of the payoff it produces but rather the size of that payoff compared to what could have been accomplished. A state in which fraud and abuse are rampant may recover more in overpayments, yet be less effective, than one in which such transgressions are rare and the recovery rate low.

Our recommendation on this subject is as follows:

RECOMMENDATION NO. 8 - At least on an experimental basis, a designated percentage of the physicians selected for audit in each state should be chosen entirely at random. The findings associated with these individuals should be kept separate for self-evaluative purposes.

This arrangement, it will be seen, produces several important benefits:

- a. First, as noted above, a random sample is useful as an evaluative tool, by providing a baseline against which the effects of formal screening may be compared.
- b. Secondly, since all physicians are now subject to audit, it protects against those statistically sophisticated providers who manage to escape detection by playing the "numbers" game.
- c. Finally, because it is based on a random sample, it permits useful, unbiased estimates to be derived as to the true dollar volume of overpayments within the state in question. 2/

1/ This statement is not intended to connote that profile analysis is of no value but rather that the specific form of profile analysis used in State B was not nearly as effective as its recovery figures might indicate.

2/ Note that screening methods fail to produce such estimates. A sample whose units were selected specifically because they "look suspicious" cannot be used to estimate the extent of Medicare/Medicaid overpayment in a given state. In the hypothetical example given on the preceding page, random sampling methods correctly demonstrated that the overpayment problem was about 3.6 times as severe in State B as in A, whereas had one relied solely on the sample produced through screening, one would have erroneously inferred a ratio of only 2 to 1.

A second evaluation element currently lacking is the ability to establish which screens produce the best leads - i.e., do the best job of identifying providers whose performance, when audited, shows definite signs of fraud and/or abuse - as opposed to those which mainly produce false alarms.

EXAMPLE: State X employs three different types of screens: A, B, and C. Over the course of a year, the performance figures associated with these screens were as follows:

	<u>No. of Physicians Flagged^{1/}</u>	<u>No. For Whom Overpayments Were Identified</u>	<u>Dollars Recovered</u>	<u>Number Referred for Investigation of Fraud</u>
Screen A	60	2	\$ 400	0
Screen B	40	1	\$ 500	0
Screen C	10	7	47,000	2

No elaborate discussion is needed to recognize that C is by far the most effective of the three screens, while A and B are hardly pulling their weight. This information should be recorded and retained not only for self-evaluative purposes but for dissemination nationwide. While regional variations in practice are normally to be expected, the fact that Screen C was found so productive in State X might serve to trigger its introduction and/or wider application in other states as well.

Insights of this nature can be taken a step further: Each year, a large percentage of the cases investigated in each state result from referrals (beneficiary complaints, etc.) rather than from screening. If those leads which turn up evidence of fraud or abuse had by and large been picked up by the postpayment screening system as well, one might rest content that

^{1/} Some physicians, of course, may have been flagged by more than one screen.

the screens were doing a good job; if, on the other hand, the vast majority of these cases managed to slip through the screens, one might legitimately question the value of the postpayment screening process--as currently implemented.

To conclude this report, our final recommendation is:

RECOMMENDATION NO. 9 - Study should be performed as to the feasibility of requiring carriers and fiscal agents to record routinely,

- a. The number of providers, by type, identified as possibly aberrant by each exception-type screening report used over the past year.
- b. The number of such providers (by type and by screen) eventually designated for detailed audit.
- c. The results of each such investigation, in terms of
 - (1) The amount of overpayment identified
 - (2) The amount of overpayment recovered
 - (3) Action, if any, taken with respect to the investigation of fraud
 - (4) Any other actions deemed relevant 1/
- d. A breakdown of referrals from other sources in which there was produced persuasive evidence of aberrant behavior, accompanied by an indication as to whether the provider involved had shown up as an exception on the screening reports, and if so, which one(s). (NOTE: This category need not be restricted to referrals. If Recommendation No. 8 is adopted, physicians included in the random audit, and whose performance is judged aberrant, should also be checked against the results of the screening process.)

Given computerization, the effort required to produce this information should not be exorbitant. Certainly, the information itself is an important element of any attempt at self-evaluation and a first step toward (a) reducing the vast mountains of paperwork currently being generated in the field, while (b) increasing the effectiveness with which Medicare/Medicaid fraud and abuse can be detected, and through meaningful detection, deterred.

1/ Most of this information is of course currently being reported. The one element which is lacking, however, is the ability to relate these actions to the specific screen or screens which caused them to happen.

APPENDIX A

AGENCIES AND PERSONS VISITED

SOUTH CAROLINA

- Medicare Carrier/
Medicaid Fiscal Agent

Blue Cross/Blue Shield of South Carolina

- Persons Visited

Ms. Lyn Bankhead - Vice President,
Government Claims
Ms. Rasha Martin - Mgr., Medicare B Claims
Mr. Harvey Galloway - Mgr. Medicaid Claims
Mr. David DuPre - Mgr. Professional
Utilization Branch

- Others Participating
in Visit

Mr. Donald Ridley - HCFA Project Officer
Mr. Alan Bradt - Division of Systems,
Medicare Bureau
Mr. Leon Myers - Resident Representative,
Medicare Bureau

- State Representatives
Visited

Mr. C. L. Oswald - Director,
Medical Assistance Division
Mr. William E. Smith - Chief, Programs
and Certification Branch
Mr. John T. Molan - Chief, Professional
Branch

PENNSYLVANIA

• Medicare Carrier

Pennsylvania Blue Shield

- Persons Visited

David J. Jones, M.D. - Vice President,
Utilization and Professional Relations
Mr. Steward Uhler - Director,
Utilization Division
Mr. Robert Warren - Director, Medicare
Claims Division
Mr. Thomas Harbold - Manager, Medicare
Claims Review

- Others Participating
in Visit

Mr. Hampton Jesse - Resident Representative,
Medicare Bureau

• Medicaid Fiscal Agent

Pennsylvania Department of Public Welfare

- Persons Visited

Mr. Glenn Johnson - Director, Bureau of
Medical Assistance
Ms. Fortuna Russell - Assistant to the
Commissioner, Medical Programs

- Others Participating
in Visit

Mr. Arthur Tsigas - Region III
Medicaid Representative

TENNESSEE

- Medicare Carrier
 - Persons Visited
 - Equitable Life Assurance Society
 - Mr. Thomas Stahl - Director, Medicare
 - Ms. Barbara S. Jordan - Manager, Health Services
 - Ms. Barbara Nelson - Supervisor, Program Evaluation
 - Ms. Faye Walker - Supervisor, Professional Relations
 - Ms. Carolyn Kirchner - Supervisor, Exception Unit
- Medicaid Fiscal Agent
 - Persons Visited
 - EDS Federal
 - Ms. Kay Lewis - Supporting Manager, Medical Policy
- State Representatives Visited
 - Others Participating in Visit
 - Mr. Charles Yoakum - Chief, Program Implementation
 - Mr. Richard Wolverton - Manager, Systems Analysis
 - Mr. Mark Hagewood - Medicaid Investigations
 - Mr. Stacy Johnson - Region IV Medicaid Representative

COLORADO

- Medicare Carrier/
Medicaid Fiscal Agent

Blue Cross/Blue Shield of Colorado

- Persons Visited

Ms. Eleanor Dodge - Medicare Coordinator
Dr. W. L. Bennett - Vice President,
Professional Relations
Mr. Gene Fischer - Director, Medicare
B Processing
Mr. Bruce Tawson - Director, Utilization
Review
Mr. Bill McRae - Health Data Analyst,
Utilization Review
Ms. Pat Luby - Publications Coordinator
Mr. Al Knaub - Manager, Medicaid Systems
and Support Services
Mr. Perry Ward - Manager, Medicaid Claims

- Others Participating
in Visit

Mr. Ben Wilson - Resident Representative,
Medicare Bureau
Mr. Norin Elfton - Medical Bureau*
Mr. Charles Bright - Medicaid Bureau*
Mr. Bert Ferenz - Office of Program Integrity*
Mr. Chuck Ralston - Office of
Program Integrity*

* Region VIII

- State Representatives
Visited

Ms. Barbara Allen Ford - Assistant Director,
Division of Medical Assistance
Ms. Pat Floyd - Chief, Appeals and Recovery

IOWA

- Medicare Carrier/
Medicaid Fiscal Agent

Blue Cross/Blue Shield of Iowa

- Persons Visited

Mr. Robert Kuhlman - Director,
Government Programs
Mr. Tony Fosselman - Director,
Medical Affairs
Mr. Steve Wood - Manager,
Quality Assurance
Ms. Joanne Lillegard - Manager,
Medical Review
Mr. Bruce Price - Postpayment UR
Coordinator

- Others Participating
in Visit

Mr. Thomas Brady - Resident Representative,
Medicare Bureau

- State Representative
Visited

Mr. John Buenting

INDIANA

- Medicare Carrier/
Medicaid Fiscal Agent

Blue Cross/Blue Shield of Indiana

- Persons Visited

Mr. Michael Hellmer - Director,
Prepayment Department
Mr. Ray Snider - Director, Health
Services Audit
Mr. Thomas Blunk - Manager, Research
and Evaluation
Mr. Mike Guyot - Director, Health Services
Research and Development
Ms. Sue Willis - Medicare Coordinator
Mr. Robert Harding - Manager, Case
Development Section
Ms. Johnnie King - Supervisor, Medicare
Health Services Audit
Ms. Clara Hiatt - Supervisor, Medicaid Health
Services Audit

- Others Participating
in Visit

Mr. John Joyce - Resident Representative,
Medicare Bureau
Ms. Wanda Hayward - SDPW Medicaid Consultant
Ms. Cora Heath - Office of Program Integrity,
Region V
Ms. Lisanne Brown - Office of Program
Integrity, Region V

- State Representatives
Visited

Mr. Robert Smith - Assistant Administrator
for Medicaid
Mr. James Eskridge - Division Attorney

OKLAHOMA

- Medicare Carrier
(except for those who are
also Medicaid recipients)

- Persons Visited

- Medicare Carrier (Medicaid
recipients)/Medicaid Fiscal
Agent

- Persons Visited

- Others Participating
in Visit

Aetna Life and Casualty

Mr. Fred C. Bush - Manager, Medicare Claim
Administration
Mr. Orlan Jones - Administrator
Mr. Sam Fox - Supervisor, Claim
Analysis Unit
Ms. Linda Langham, R.N. - Acting
Unit Leader

Oklahoma Department of Institutions,
Social and Rehabilitative Services

Bertha M. Levy, M.D. - Administrative
Assistant, Medical Units Supervisor
Mr. Joseph Nicholson - Medicare/Medicaid
Coordinator
Ms. Linda Tyler - Supervisor, Utilization
Review

Mr. Robert Maxwell - Resident Representative,
Medicare Bureau
Ms. Mary Anne Durham - Division of
Systems, Medicare Bureau

VERMONT

- Medicare Carrier/
Medicaid Fiscal Agent

Blue Cross/Blue Shield of New Hampshire -
Vermont

- Persons Visited

Mr. George Bibaud - Director, Government
Programs, Health Services
Mr. Robert Swanson - Director, Utilization
and Medical Review, Health Services
Ms. Judy Miner - Supervisor, Physician
Utilization Review, Health Services
Ms. Jeannie Schoch - Analyst, Physician
Claims

- Others Participating
in Visit

Mr. Ray Harris - Assistant Resident
Representative, Medicare Bureau

NEW HAMPSHIRE

• Medicare Carrier

Blue Cross/Blue Shield of New Hampshire -
Vermont

- Persons Visited

Mr. George Bibaud - Director, Government
Programs, Health Services
Mr. Robert Swanson - Director, Utilization
and Medical Review, Health Services
Ms. Judy Miner - Supervisor, Physician
Utilization Review, Health Services
Ms. Jeannie Schoch - Analyst, Physician
Claims

• Medicaid Fiscal Agent

New Hampshire Division of Welfare

- Person Visited

Mr. Robert W. Moore - Business Administration,
Office of Medical Services

APPENDIX B

DATA ELEMENTS AND OTHER RELEVANT SYSTEM FEATURES

The four postpayment screening systems described in this Appendix are:

<u>System</u>	<u>Version Described</u>
National Association of Blue Shield Plans* (NABSP) Post UR	Blue Cross/Blue Shield of Colorado
Part B Prepayment Utilization Control System (PPUCS)	Equitable Life (Tennessee)
EDS Federal	Pennsylvania Blue Shield
SUR/MMIS	Blue Cross/Blue Shield of Indiana

1. NABSP

Physicians are screened according to parameters set in the following areas: charges submitted for services, payment on charges allowed, number of services rendered, and number of procedures performed. Excesses in any of these areas may identify a physician for possible further review. The specific reports employed are as follows:

(a) Type 01 - Provider Income Analysis

This is a routine quarterly report which lists all providers whose total charges submitted, during the four most recent calendar quarters, exceed a predetermined amount.

(b) Type 02 - Provider Income Analysis

This is a routine quarterly report which lists all providers whose total charges allowed, during the four most recent calendar quarters, exceed a predetermined amount.

These reports are used to identify physicians who receive large payments from the Medicaid and Medicare programs. Three different threshold settings are employed:

* Now Blue Shield Association.

- (i) \$100,000 - All physicians who appear on this list are automatically selected for further, more intensive review.
- (ii) \$60,000 - A sample of the physicians who appear on this list is also selected for further review. The selection process is judgmental and makes use of other factors as well; for example, all physicians on this list who were reviewed the previous year are automatically re-reviewed.
- (iii) \$25,000 - This threshold corresponds to that established nationwide for the PARE (Payment Review) Project. A sample of these physicians -- again based on judgmental factors -- is included among those selected for further review.

The column headings produced by these reports are as follows:

- Provider Number
- Number of Patients, Most Recent Four Quarters
- Number of Services, Most Recent Four Quarters
- Amount Charged
 - .. Most Recent Four Quarters
 - .. Second Most Recent Four Quarters
 - .. Percentage Change
- Amount Allowed
 - .. Most Recent Four Quarters
 - .. Second Most Recent Four Quarters
 - .. Percentage Change

(c) Type 03, 04, and 05 - Provider Identification Reports

These are exception-type reports which identify physicians whose pattern of practice departs markedly from the peer group averages, calculated on a state-wide basis. The Type 03 report lists physicians whose number of procedures performed exceeds the peer group average by more than 2.5 standard deviations during the most recent four quarters. The Type 04 report lists physicians whose ratio of services rendered per patient (for a given type of service and procedure) is more than 2.0 times the corresponding ratio for their peer group. The Type 05 report lists those whose number of services performed (again, for a given type of service and procedure) is more than 2.5 standard deviations greater than the average of their peers.

The parameter values used in these reports are variable within the program.

These reports are run on a quarterly basis and produce the same categories of information. The reports differ only in the specific individuals listed (although, of course, the same physician may be listed more than once). The column headings for the tables are as follows:

- Provider Number
- Type of Service and Procedure for Which the Specified Parameter was Exceeded
- Number of Services Performed, Most Recent Four Quarters
 - .. By Provider
 - .. By Provider's Peer Group (average)
- Number of Patients Served, Most Recent Four Quarters
 - .. By Provider
 - .. By Provider's Peer Group (average)
- Ratio of Services Performed to Patients Served
 - .. By Provider
 - .. By Provider's Peer Group
- Ratio of Patients Receiving Given Procedure to Total Patients Served
- Percentage Change, Between Most Recent Four Quarters and Second Most Recent Four Quarters
 - .. In Number of Services Performed
 - .. In Number of Patients Served
- Provider's Claims Experience, Most Recent Four Quarters
 - .. Dollars Charged
 - .. Dollars Allowed
- Average Charge Per Patient Served
 - .. By Provider
 - .. By Provider's Peer Group
- Average Dollar Amount Allowed Per Patient Served
 - .. By Provider
 - .. By Provider's Peer Group

These reports are used routinely to identify high frequency providers. The three lists are cross-referenced to indicate physicians who may appear on more than one list. Fifty to one hundred providers are normally selected each year, based on these reports, for further review. Further review normally makes use of the following reports.

(d) Type 10 - Procedure Code Analysis

This exception-type report is used on a request basis. It lists all physicians, regardless of specialty, who performed a specified procedure, within a given type of service, more than a specified number of times during the most recent four quarters. The Utilization Review Department of BC/BS requests a reasonable threshold estimate for specific procedures and/or services from the Medical Director or Medical Consultants and manually reviews

The column headings produced by this report are as follows:

- Provider Number
- Number of Patients Who Received the Given Procedure, Most Recent Four Quarters
 - .. By Provider
 - .. By Provider's Peer Group (average)
- Number of Times the Given Procedure Was Performed, Most Recent Four Quarters
 - .. By Provider
 - .. By Provider's Peer Group (average)
- Provider's Claims Experience, Most Recent Four Quarters
 - .. Dollars Charged
 - .. Dollars Allowed

An important difference between the Type 10 report and Types 03, 04, and 05 is this: In Types 03, 04, and 05, the computer searches all services and associated procedures for possible aberrant behavior; in Type 10, it only searches selected codes specified as input. BC/BS typically uses the Type 10 report, on a routine basis, to identify physicians who are using obsolete procedures, or procedures recognized as possibly unnecessary (i.e., tonsillectomy, appendectomy, etc.).

(e) Type 11 - Provider Practice Profile Report

This report is used on a request basis to permit a closer evaluation of possible trends. The Type 11 report is essentially a composite of the information normally contained in Types 03, 04, 05, and 10, broken down by calendar quarter. About half a page of computer output is devoted to each provider for whom this report is requested.

(f) Type 79 - Provider Patient Profile

This report, which is beneficiary-oriented, has been enhanced by Colorado BC/BS to include the diagnosis as well as detailed information on services performed for each beneficiary served by a specified provider.

The column headings produced by this report are as follows:

- Beneficiary Information
 - .. Identification Number
 - .. Age
 - .. Sex

- Service Information
 - .. Service Date
 - .. Place Service was Delivered
 - .. Type of Service and Procedure Performed
 - .. Diagnosis
 - .. Number of Services
- Payment Information
 - .. Amount Charged
 - .. Amount Allowed
 - .. Amount Paid to Provider
 - .. Amount Paid to Beneficiary
 - .. Date of Payment
- Place of Service Analysis and Type of Service Analysis
 - .. Number of Services
 - .. Number of Patients
 - .. Service to Patient Ratio
 - .. Amount Charged
 - .. Amount Allowed
 - .. Amount Paid to Provider
 - .. Amount Paid to Beneficiary

Using the information from these reports, the Utilization Review Division, through PARE investigations and on-going reviews, determines whether overutilization or misutilization problems exist. If fraud is suspected, the case is referred to Program Integrity for further development. If abuse and overpayment are indicated, a sample of beneficiaries served by the physician are selected (30 individuals or 7% of the total number of patients, whichever is greater) using a disproportionate stratified random sampling plan developed by Blue Shield of Florida. Once the beneficiaries are selected, their claims are examined to determine the amount of overpayment, if any, involved. Overpayments identified through sampling are applied to the physician's total patient population to determine the total overpayment. Under PARE, BC/BS investigates approximately 25 providers a year with 25 other providers involved in an on-going non-PARE review program.

2. PUCCS

In this system, unusual patterns of utilization (services and/or pricing) are detected by calculating certain ratios which relate services to patients, and comparing those ratios to the corresponding values for that provider's peer group. These calculations are performed for the sixteen service categories defined in the Part B Postpayment Utilization Control System, as shown on page 1-10 of the main text. The carrier may combine specialties, if desired. The specific ratios calculated are as follows:

- (a) Percentage of total patients who receive each type of service
- (b) Average charges per patient
- (c) Average number of services per patient.

Providers with ratios exceeding 125 percent of the average for their peer group in one or more of the three areas are flagged for manual review. (The 125 percent level is set by Equitable Life and may be changed, if needed.) The specific reports used are described below:

(1) MUT 03 - Provider Utilization Summary

The inputs parameters applicable to this report include:

- (a) Parameters which identify the provider universe to be considered
 - Minimum amount for
 - .. submitted charges
 - .. number of patients treated
 - Combinations of
 - .. procedure codes and place of service
 - .. speciality codes which define the physician's peer group
- (b) Thresholds which identify exceptions
 - Maximum allowable deviation, from peer group average, with respect to:
 - .. percentage of patients receiving each type of service
 - .. average charges for patient
 - .. number of services per patient

Once these parameters have been selected, the applicable ratios are calculated and compared to those for the defined peer group. Providers exceeding the threshold limit of 125 per cent (or whatever limit the carrier selects) of the average are flagged. Two types of reports are produced by this program:

MUT 03-02 Provider Utilization Summary - Specialty Group covers the particular peer group specified.

MUT 03-03 Provider Utilization Summary - Individual is produced for specified provider numbers.

Records may be printed for all providers or for only those who exceed one or more of the defined thresholds. The column headings produced by these reports are as follows:

- Charges submitted (by the provider)
- Utilization reductions
 - .. Amount reduced
 - .. Number of services reduced
- Reasonable charge reductions
 - .. Amount reduced
 - .. Number of services reduced
- Charges allowed
- Number of patients receiving specified service
- Percentage of total patients receiving specified service (computer flag indicated)
- Total number of services
- Average charge per patient (computer flag indicated)
- Average number of services per patient (computer flag indicated)

This information is reported for the total practice and for each of the sixteen service categories for the specialty group or individual provider(s) specified. These reports are used to manually examine the individual provider's experience and compare it with the experience of the appropriate peer group. Asterisks are used as flags to indicate ratios which exceed the threshold.

(2) MUT 05 - Provider Utilization - Cross Reference Schedule

This report ranks the information produced by MUT 03. Each provider is ranked from high to low within each service category and each area of comparison (i.e., percentage of total patients who receive designated services, average charge per patient, and average number of services per patient). The carrier may request information on the n providers who have the highest percentage deviation from their specialty group average. The column headings produced by this report are as follows:

- Provider name
- Provider number
- Specialty code
- Rank
- Percentage deviation from the group average (calculated on a statewide basis)

This report can be used in conjunction with MUT 03-02, 03 reports to identify the highest utilization providers in one or more service categories and comparison areas; however, this report is indicated as the least productive of those used by Equitable.

3. EDS Federal

The Utilization Review Division of Pennsylvania Blue Shield reviews paid claims for possible physician overutilization, using the PBS-modified version of EDSF. The complete list of report summaries is presented in Exhibit B-1, on the following page. Physicians are screened according to parameters set in three areas: financial payment on charges allowed, number of services allowed, number of procedures performed. Excesses in any of these areas may identify a physician for possible further review. Reports summarize the individual physician's activities and also compare the physician's pattern of practice to that of other physicians in his specialty group. The reports used routinely are discussed below:

(1) UR155 - Provider Summary

This report reviews the individual physician's activities over a period of time. It is prepared on a quarterly basis and lists in detail all services provided by the physician to individual beneficiaries. The column headings produced by this report are as follows:

- Beneficiary Number
- Date of Service
- Type of Service and Procedure Code (TS&P)
- Multiple Services Indicator
- Diagnosis Code
- Place of Service
- Billed Amount
- Allowed Amount
- Paid Amount

EXHIBIT B1. UR REPORT SUMMARY

Report No.	Frequency	Hard Copy or Microfiche	Major Data Elements	Description
155	Qtr	Fiche	Provider #, HI Claim, Date of Svc.	Claims submitted by all providers which were paid or rejected during the report period.
140	Qtr*	Fiche	Provider #	One line statistical summary for each provider with one or more approved claims.
70	SA YTD	Fiche	UR Charge Class Specialty, Type Service, Procedure	Peer group norm calculation data base for each procedure by type of service. Includes only those providers with more than 30 patients and 50 services.
81	SA YTD	Fiche	Provider #, TS&P	Procedure analysis for each provider who had one or more approved claims.
80A	SA YTD	HC	Total Weight, Descending Order	Index to the top 200 weighted providers.
80B	SA YTD	HC	Total Dollars Exceeded, Descending Order	Index to the top 200 doctors based on total dollars exceeding peer group procedural norms.
80C	SA YTD	HC	Provider #	The 80A and 80B in doctor number sequence.
80D	SA	HC	Unique Weight, Descending Order	Frequency distribution of weights.
80E	SA YTD	Fiche	Specialty, Descending Statistical Percentiles	Index to the top 10% of the providers in each specialty based on the total statistical percentiles.
275	SA YTD	Form	Provider # Type Svc/Procedure	Top x number of providers based on total dollars exceeding peer group procedural norms.
290	SA YTD	Fiche	Procedure Pair Index #	High to low ratio for selected pairs of type of service and procedures.
130	ANN	Fiche	Specialty Amt. Allowed per Patient Pct.	Those doctors above the 79th percentile within each specialty based on dollars allowed per patient.
135	ANN	Fiche	Specialty Services per Patient Pct.	Those doctors above the 79th percentile within each specialty based on services per patient.

*1st and 3rd Quarters only -- on the 2nd and 4th Quarters this data appears on the UR 81.

SA = Semiannual
YTD= Year to date

At the conclusion of the report, total services, total patients served, total amounts billed, allowed, and paid are indicated.

(2) UR 81 - Procedure Analysis by Provider

In this report, the individual physician's pattern of practice is compared to that of his peers according to specialty group and location.* This report is prepared on a semi-annual (July) and annual (January) basis. The column headings produced are as follows:

- Type of Service
- Procedure
- Number of allowed services for each type of service and procedure (TS&P)
 - .. Inpatient
 - .. Outpatient
 - .. Total
- Dollar amount for allowed services for each TS&P
 - .. Billed
 - .. Allowed
- Period of time
- Patient count
- Individual doctor ratio for each TS&P (Total allowed services per 100 patients)
- Peer group norm for each TS&P (Average allowed services per 100 patients by members of peer group, plus two standard deviations)**

If, for a given TS&P, the individual doctor ratio exceeds the peer group norm, the following additional information is provided (for that TS&P) for the four most recent six month periods:

-
- * Five "location" codes are specified. They are 001 - Areas around medical schools, 002 - Greater metropolitan areas, 003 - Lesser metropolitan areas, 004 - Rural areas, and 005 - Group practices.
- ** In calculating the peer group standard deviation, the program "tightens" the estimate by excluding all values which initially lie more than a specified number of standard deviations from the mean.

- A "weight", defined as

$$\frac{\text{Individual Doctor Ratio} - \text{Peer Group Norm}}{\text{Peer Group Norm}} \times \frac{\text{Total Allowed Services}}{10}$$

- A "Norm for Total Services", based on the provider's patient count, i.e.

$$\frac{\text{Peer Group Norm} \times \text{Provider's Patient Count}}{100}$$

- "Excess Services", defined as

$$\text{Total Services Allowed} - \text{Norm for Total Services}$$

- "Excess Dollars Billed", defined as

$$\frac{\text{Dollar Amount Billed}}{\text{Total Services Allowed}} \times \text{Excess Services}$$

- "Percent Excess Services", defined as

$$\frac{\text{Excess Services}}{\text{Norm for Total Services}} \times 100$$

- Number of Providers in Peer Group
 - .. Not exceeding Norm for Total Services
 - .. Exceeding Norm for Total Services
- Provider's Rank for TS&P (based on Individual Doctor Ratio and Number of Providers Exceeding Norm)
- Flag Indicator for TS&P, consisting of:
 - .. H denotes provider ratio was eliminated from the norm calculation as a high extreme
 - .. L denotes provider ratio was eliminated from the norm calculation as a low extreme
 - .. * denotes provider ratio was included in the norm calculation but is more than two standard deviations from the recalculated mean value.*

Providers who are flagged H or * for any TS&P may be placed on the "flag doctor" list used at prepayment review and may be subjected to a PARE investigation.

* The reader will note that the term "norm", as used in the UR81 context, differs from its usual connotation. It is not a mean or an average but rather a statistical threshold several standard deviations from the mean.

(3) UR 130 - Amount Allowed Per Patient by Specialty

AND

(4) UR 135 - Services Per Patient by Specialty

These reports rank the top 10-15% of physicians within a specialty group and are utilized on an annual basis. The column headings for both tables are as follows:

- Provider Number
- Practice Location
- Specialty
- Billed Amounts
 - .. Assigned claims
 - .. Non-assigned claims
 - .. Total
- Amount Allowed
 - .. Assigned claims
 - .. Non-assigned claims
 - .. Total
- Amount Paid
 - .. Provider
 - .. Beneficiary
 - .. Total
- Total Number of Services
- Total Number of Patients
- Average Amount Allowed Per Patient
- Average Number of Services Per Patient

Those providers indicated as candidates for further investigation based on the reports described above are included in PBS's PARE project. The physicians are then reviewed in depth by using the following summary reports designed to identify physicians with aberrant practices.

(5) UR 80A - Top 200 Providers Ranked by Weight

(6) UR 80B - Top 200 Providers Ranked by Excess Dollars Billed

(7) UR 80C - Top Offenders (Unranked) in Doctor Number Sequence (UR 80A and UR 80B combined)

The column headings for these tables are as follows:

- Provider Number
- Weight (for specified TS&P)
- Excess Dollars Billed (as indicated on UR 81)

(8) UR 80D - Total Weight Frequency Distribution

This report screens each provider's weights over all TS&P's and produces the following column headings:

- Weight (Provider's total weight for all procedures, listed in descending order)
- Frequency (i.e., number of providers with the same weight)
- Total weight (weight X frequency)
- Percent of grand total weight
- Cumulative percent of total
- Cumulative number of providers

Once a review is conducted, if fraud and/or abuse is suspected, the case is referred to the Region III office for action. If unusual patterns of practice are detected by the UR Reports (other than fraud or abuse), the Utilization Department will investigate the provider and will ask the UR Medical Advisor in the physician's specialty and locality to give an opinion on the physician's practice behavior. If action is necessary, the case will be referred to the Peer Review Program of the Doctor's Professional Organization.

If overpayment is detected, the physician will be notified of the overpayment through letters or phone conversations and a payment agreement will be reached. If the physician does not respond, the case is referred to the Professional Relations Representative. PBS may recover overpayment by offsetting the amount owed against the physician's claims.

4. SUR/MMIS

The SUR subsystem used in Indiana includes nine reports specifically directed toward the examination of provider utilization patterns. Those reports are:

	<u>Report No.</u>
Provider class profiles: averages and standard deviations	WF13-02R
Provider class profiles: frequency distributions	WF15-01R
Provider exception control limits	WF17-01R
Provider exception summary	WF17-02R
Provider summary profile report	WF19-01R
Provider exception review index	WF21-01R
Physician treatment analysis class profiles	WF65-01R
Physican treatment analysis report	WF69-01R
Physician exceptional treatment patterns	WF69-03R

Facsimiles of these reports, with brief explanations for each, are presented on the pages which follow.

RUN DATE: 04/15/77

PROVIDER CLASS PROFILES: AVERAGES AND STANDARD DEVIATIONS
FOR QUARTER ENDING MARCH 31, 1977
CATEGORY OF SERVICE: 11 CLASS GROUP: 00

MF13-02R PAGE 1

REPORT ITEM/SECTION-----				(1)	(1)	(1)	(1)	(1)	(1)	(1)
NO	TITLE	RIW	FOR SVC IN AVG. QTR	THIS QTR	FOR SERVICES 1 QTR AGO	2 QTRS AGO	3 QTRS AGO	4 QTRS AGO	TREND RATE	
01 MASTERS CONTROL SECTION										
01	TOTAL DOLLARS PAID	03	AVG. 1506.94	579.75	1726.25	1590.25	1389.25	1314.00	-9.03	
			S.D. 2674.01	576.48	2742.92	2914.36	2614.06	2453.20	+70.11	
02	TOTAL RECIPS SERVED	05	AVG. 54.75	37.00	57.25	54.25	47.50	60.00	-9.95	
			S.D. 85.93	29.20	87.12	93.19	90.36	80.45	+79.82	
03 RECIPIENT VOLUME SUMMARY										
01	NO RECIPS - MEDICAID ONLY	10	AVG. 52.13	34.75	50.25	51.00	47.50	59.75	-14.21	
			S.D. 67.52	30.84	89.53	94.81	90.36	80.69	+74.00	
02	NO RECIPS - MEDICARE ONLY	10	AVG. 10.50	9.00	28.00	13.00	0.00	1.00	+89.52	
			S.D. 0.00	0.00	0.00	0.00	0.00	0.00	+0.00	
03	PCT RECIPS - AGE GROUP 00-12	10	AVG. 35.85	45.72	22.25	17.03	28.02	27.05	-5.17	
			S.D. 20.50	33.28	25.04	21.69	22.50	33.59	+60.31	
04	PCT RECIPS - AGE GROUP 13-20	10	AVG. 9.50	16.63	7.66	6.09	17.56	8.65	+17.44	
			S.D. 10.59	13.15	12.11	12.17	23.64	11.33	+73.34	
05	PCT RECIPS - AGE GROUP 21-49	10	AVG. 20.26	20.39	12.13	15.96	10.61	26.08	-30.42	
			S.D. 14.54	12.00	16.02	10.70	21.61	21.27	+55.14	
06	PCT RECIPS - AGE GROUP 50-999	10	AVG. 12.43	23.03	10.35	13.50	14.43	17.64	-8.91	
			S.D. 10.99	10.04	16.53	19.90	22.21	28.07	+64.45	
04 FINANCIAL SUMMARY SECTION										
01	TOTAL AMOUNT CHARGED	10	AVG. 1795.13	649.25	2013.50	1652.00	1712.00	1603.00	-9.02	
			S.D. 3132.06	630.65	3046.03	3323.58	3240.42	2994.02	+79.54	
02	AMT PAID MEDICAID PRIMARY	10	AVG. 1445.00	546.00	1519.75	1564.50	1389.25	1310.00	-18.72	
			S.D. 2700.04	576.02	2632.11	2933.05	2614.06	2455.90	+66.96	
03	AMT PAID H1 - MR PRIMARY	10	AVG. 101.75	135.00	320.00	63.00	0.00	16.00	+90.10	
			S.D. 0.00	0.00	0.00	0.00	0.00	0.00	+0.00	
04	AVG PNT PER RECIPIENT	10	AVG. 14.00	22.45	12.49	14.52	20.38	15.60	-21.61	
			S.D. 15.33	13.27	15.32	16.03	22.40	16.40	+34.35	
05	PCT OF CHARGES PAID	10	AVG. 72.03	106.33	36.02	49.35	86.07	84.40	-20.67	
			S.D. 56.31	16.05	52.75	50.62	56.00	57.30	+30.47	
06	AVG CHARGE PER CLAIM	10	AVG. 15.11	21.10	11.98	14.61	26.98	6.60	-18.32	
			S.D. 16.35	12.06	16.19	10.11	31.30	15.23	+37.21	
05 SUMMARY OF SERVICES RENDERED SECTION										
01	TOT NO PREVENTIVE PROC	10	AVG. 34.25	40.50	27.00	28.50	27.50	54.00	-55.93	
			S.D. 25.10	43.10	30.10	40.31	37.40	15.56	+88.00	
02	TOT NO RESTORATIVE PROC	10	AVG. 67.25	33.00	70.00	60.00	71.00	68.00	-0.74	
			S.D. 0.00	0.00	0.00	0.00	0.00	0.00	+0.00	
03	NO PREVENTIVE PROC - RECIP	10	AVG. 0.66	0.60	0.10	0.17	0.41	0.66	-44.21	
			S.D. 0.40	0.57	0.25	0.23	0.13	0.51	+49.06	
04	NO RESTORATIVE PROC - RECIP	10	AVG. 0.90	1.63	1.00	0.87	0.91	1.00	-0.59	
			S.D.							

SEE PAGE 2 OF THIS REPORT FOR EXPLANATION.

RUN DATE: 04/15/77

PROVIDER CLASS PROFILES: AVERAGES AND STANDARD DEVIATIONS
FOR QUARTER ENDING MARCH 31, 1977
CATEGORY OF SERVICE: 11 CLASS GROUP: 00

MF13-02R PAGE 2

----- REPORT ITEM/SECTION-----		(1)	(1)	(1)	(1)	(1)	(1)
NO	TITLE	FOR SVC IN	THIS QTR	FOR SERVICES RENDERED TO DATE AS OF:	1 QTR AGO	2 QTRS AGO	3 QTRS AGO
		AVG. QTR					

RIM

TREID
RATE

B-17

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*****
#
# THIS REPORT DISPLAYS BOTH THE COMPUTED MEAN AND ONE STANDARD
# DEVIATION FROM THE MEAN, BY CLASS GROUP, FOR EACH REPORT ITEM
# DEFINED BY THE CLASS GROUP. THIS REPORT IS PRIMARILY INTENDED
# TO SUPPORT THE EXCEPTION PROCESSING TECHNIQUES EMPLOYED IN THE
# PRODUCTION OF ITS CORRESPONDING SURVIVAL PROFILE REPORTS. TO THIS
# END IT PROVIDES A MEANS BY WHICH THE STATISTICAL VALIDITY OF
# EACH USER DEFINED CLASS GROUP MAY BE VERIFIED; AND BY WHICH
# REALISTIC EXCEPTION CRITERIA MAY BE ESTABLISHED WHERE SYSTEM
# GENERATED CRITERIA ARE NOT ACCEPTABLE. THIS REPORT IS PRODUCED
# AT THE END OF EACH QUARTER.
#
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RUN DATE: 04/15/77

PROVIDER CLASS PROFILES: FREQUENCY DISTRIBUTIONS
FOR QUARTER ENDING MARCH 31, 1977
CATEGORY OF SERVICE: 10 CLASS GROUP: 01

MF15-01R PAGE 1

05.29 NO OV INJECTION - RECIPIENT
AVERAGE QUARTER

CLASS	RANGE	PROVIDERS
1	LESS THAN 0.01	5
2	0.01 - 1.00	861
3	1.01 - 2.00	43
4	2.01 - 3.00	3
5	3.01 - 4.00	3
6	4.01 - 5.00	0
7	5.01 - 6.00	1
8	6.01 - 7.00	0
9	7.01 - 7.20	1
	TOTAL	917

PCTILE	VALUE
5 TH	0.04
10 TH	0.06
15 TH	0.08
20 TH	0.10
25 TH	0.11
30 TH	0.13
35 TH	0.15
40 TH	0.17
45 TH	0.20
50 TH	0.22
55 TH	0.25
60 TH	0.29
65 TH	0.32
70 TH	0.37
75 TH	0.45
80 TH	0.51
85 TH	0.65
90 TH	0.81
95 TH	1.06

05.29 NO OV INJECTION - RECIPIENT
CURRENT QUARTER

CLASS	RANGE	PROVIDERS	PCTILE	VALUE
1	LESS THAN 0.01	0	5 TH	0.05
2	0.01 - 1.00	479	10 TH	0.07
3	1.01 - 2.00	16	15 TH	0.09
4	2.01 - 3.00	2	20 TH	0.11
5	3.01 - 4.00	1	25 TH	0.14
	TOTAL	498	30 TH	0.17
			35 TH	0.18
			40 TH	0.21
			45 TH	0.23
			50 TH	0.25
			55 TH	0.29
			60 TH	0.33
			65 TH	0.36
			70 TH	0.44
			75 TH	0.50
			80 TH	0.57
			85 TH	0.68
			90 TH	0.86
			95 TH	1.00

B-18

 " THE PROVIDER CLASS PROFILES: FREQUENCY DISTRIBUTIONS IS INTEND-
 " TO SERVE AS AN EXTENSION OF THE OTHER CLASS PROFILE REPORTS
 " TO SUPPORT THE EXCEPTION PROCESSING TECHNIQUES EMPLOYED IN
 " THE PRODUCTION OF THE PROVIDER SUMMARY PROFILE REPORT. THIS
 " REPORT IS PRODUCED DURING THE QUARTERLY REPORTING CYCLE, IF
 " REQUESTED BY THE USER.
 " *****

RUN DATE: 04/15/77

PROVIDER EXCEPTION CONTROL LIMITS
FOR QUARTER ENDING MARCH 31, 1977
CATEGORY OF SERVICE: 01 CLASS GROUP: 01

MF17-01R PAGE 1

REPORT ITEM/SECTION----- NO TITLE	FOR SVC IN AVE. QTR	(1) THIS QTR	(1) 1 QTR AGO	(1) 2 QTRS AGO	(1) 3 QTRS AGO	(1) 4 QTRS AGO	(1) TREND RATE
09 PCT RECIPS - DIAG GP 1400-2399	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 49.39 40.67 30.04 52.95 46.30 43.68 +101.3					
10 PCT RECIPS - DIAG GP 2400-2799	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 54.51 34.00 39.69 55.45 46.76 24.24 +135.5					
11 PCT RECIPS - DIAG GP 2800-2099	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 51.28 9.36 25.39 49.79 11.30 60.47 +171.0					
12 PCT RECIPS - DIAG GP 2900-3199	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 88.88 22.53 12.57 65.59 33.77 56.70 +126.5					
13 PCT RECIPS - DIAG GP 3200-3899	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 55.04 33.76 35.27 35.53 62.53 60.51 +132.6					
14 PCT RECIPS - DIAG GP 3900-4509	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 93.45 42.30 53.42 63.30 66.76 66.18 +124.0					
15 PCT RECIPS - DIAG GP 4600-5199	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 75.01 61.00 54.78 45.26 59.40 67.80 +103.9					
16 PCT RECIPS - DIAG GP 5200-5799	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 84.55 53.62 52.65 38.56 48.05 82.06 +109.9					
17 PCT RECIPS - DIAG GP 5800-6299	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 84.32 52.40 63.12 65.78 80.77 42.73 +125.0					
18 PCT RECIPS - DIAG GP 6300-6709	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 62.61 23.24 39.28 34.59 38.14 48.81 +97.8					
19 PCT RECIPS - DIAG GP 6800-7099	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 74.24 19.77 48.23 50.35 40.85 47.20 +121.7					
20 PCT RECIPS - DIAG GP 7100-7399	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 51.98 10.59 35.57 58.60 18.50 49.19 +151.3					
21 PCT RECIPS - DIAG GP 7400-7599	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 59.39 9.94 16.81 63.34 51.53 51.53 +01.8					
22 PCT RECIPS - DIAG GP 7600-7799	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 13.61 7.01 34.60 65.25 36.56 3.23 +137.6					
23 PCT RECIPS - DIAG GP 7800-7999	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 75.06 25.00 50.53 44.69 58.63 42.68 +123.5					
24 PCT RECIPS - DIAG GP 8000-9999	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 90.18 36.56 56.02 67.39 56.58 56.37 +125.6					
25 PCT RECIPS - DIAG GP Y000-Y199	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 199.55 37.51 35.31 84.40 96.33 101.56 +109.5					
26 PCT RECIPS - DIAG GP Y200-Y299	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 62.63 35.74 43.69 50.03 31.44 52.67 +126.1					
27 PCT RECIPS - DIAG GP UNDEFINED	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER .00 .00 .00 .00 .00 .00 +0.0					
28 PCT RECIPS - DIAG GP BLANKS	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER .00 .00 .00 .00 .00 .00 +0.0					

FINANCIAL SUMMARY SECTION

01 TOTAL AMOUNT CHARGED	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 40990.10 22711.37 41678.98 44797.82 42286.30 43374.16 +113.6
02 AMT CHARGED - MEDICAID PRIMARY	10 LOWER .00 .00 .00 .00 .00 .00 +0.0	UPPER 30232.94 15476.64 30419.49 33598.81 30085.81 34902.32 +105.2

SEE PAGE 2 OF THIS REPORT FOR EXPLANATION.

RUN DATE: 04/15/77

PROVIDER EXCEPTION CONTROL LIMITS
FOR QUARTER ENDING MARCH 31, 1977
CATEGORY OF SERVICE: 01 CLASS GROUP: 01

MF17-01R PAGE 2

----- REPORT ITEM/SECTION-----
NO TITLE

RIM	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	FOR SVC IN AVG. QTR OR SVC AVG. Q	THIS QTR	1 QTR AGO	2 QTRS AGO	3 QTRS AGO	4 QTRS AGO	TREND RATE

B-20

 * THIS REPORT DISPLAYS, BY CLASS GROUP WITHIN CATEGORY OF SERVICE, *
 * THE LOWER AND UPPER EXCEPTION LIMITS FOR EACH ITEM. THOSE ITEMS *
 * FOR WHICH EXCEPTION PROCESSING IS TO BE DONE IS FLAGGED WITH AN *
 * ASTERISK. THOSE ITEMS WHOSE EXCEPTION CONTROL LIMITS WERE MAN- *
 * UALLY OVERRIDDEN BY THE USER ARE FLAGGED WITH THE LETTER "M". *
 * THE INTENDED USAGE OF THIS REPORT IS AS A REFERENCE TOOL IN CON- *
 * JUNCTION WITH THE PROVIDER EXCEPTION SUMMARY REPORT TO DETER- *
 * MINE WHEN CURRENT EXCEPTION CONTROL LIMITS ARE INADEQUATE AND *
 * PERHAPS NEED TO BE MANUALLY OVERRIDDEN TO A DIFFERENT VALUE. *
 * THIS REPORT IS PRODUCED AT CALENDAR QUARTER END. *
 * *****

RUN DATE: 04/15/77

PROVIDER EXCEPTION SUMMARY
FOR QUARTER ENDING MARCH 31, 1977
CATEGORY OF SERVICE: 07 CLASS GROUP: 03

MF17-02R PAGE 1

ID	REPORT ITEM/SECTION TITLE	TOTAL WEIGHT	RIM	(1) FOR SVC IN AVG. QTR		(1) THIS QTR		(1) FOR SERVICES RENDERED TO DATE AS OF 1 QTR AGO		(1) 2 QTRS AGO		(1) 3 QTRS AGO		(1) 4 QTRS AGO		(1) TREND RATE	
				NO.	X	NO.	X	NO.	X	NO.	X	NO.	X	NO.	X	NO.	X
09	PCT RECIPS - DIAG GP 1400-2399	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	PCT RECIPS - DIAG GP 2400-2799	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	PCT RECIPS - DIAG GP 2800-2899	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	PCT RECIPS - DIAG GP 2900-3199	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	PCT RECIPS - DIAG GP 3200-3899	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	PCT RECIPS - DIAG GP 3900-4589	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	PCT RECIPS - DIAG GP 4600-5199	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	PCT RECIPS - DIAG GP 5200-5779	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	PCT RECIPS - DIAG GP 5800-6299	20	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	PCT RECIPS - DIAG GP 6300-6789	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	PCT RECIPS - DIAG GP 6800-7099	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	PCT RECIPS - DIAG GP 7100-7399	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	PCT RECIPS - DIAG GP 7400-7599	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	PCT RECIPS - DIAG GP 7600-7799	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	PCT RECIPS - DIAG GP 7800-7999	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	PCT RECIPS - DIAG GP 8000-9999	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	PCT RECIPS - DIAG GP 7000-Y199	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	PCT RECIPS - DIAG GP Y200-Y299	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	PCT RECIPS - DIAG GP UNDEFINED	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	PCT RECIPS - DIAG GP BLANKS	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0

FINANCIAL SUMMARY SECTION

01	TOTAL AMOUNT CHARGED	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02	AMT CHARGED - MEDICAID PRIMARY	10	LOHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			UPPER	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SEE PAGE 2 OF THIS REPORT FOR EXPLANATION.

RUN DATE: 04/15/77

PROVIDER EXCEPTION SUMMARY
FOR QUARTER ENDING MARCH 31, 1977
CATEGORY OF SERVICE: 07 CLASS GROUP: 03

WP17-02R PAGE 2

NO	REPORT ITEM/SECTION TITLE	TOTAL WEIGHT RIM	(1)	(1)	(1)	(1)	(1)	(1)	(1)
			FOR SVC IN AVG. QTR	THIS QTR	FOR SERVICES 1 QTR AGO	2 QTRS AGO	3 QTRS AGO	4 QTRS AGO	TREND RATE
			NO. X	NO. X	NO. X	NO. X	NO. X	NO. X	NO. X

 * THIS REPORT DISPLAYS, BY CLASS GROUP WITHIN CATEGORY OF SERVICE, *
 * THE NUMBER AND PERCENT OF ACTIVE PROVIDERS WHO EXCEEDED ON *
 * EACH LONGER AND UPPER EXCEPTION LIMIT. ITS PRIMARY USAGE IS AS *
 * A REFERENCE TOOL IN CONJUNCTION WITH THE PROVIDER EXCEPTION *
 * CONTROL LIMITS REPORT IN ORDER TO DETERMINE THE DISTRIBUTION OF *
 * EXCEPTIONS AND SPECIFIC ITEMS WHERE MANUAL INTERVENTION IN EX- *
 * CEPTION LIMIT GENERATION MAY BE REQUIRED. THIS REPORT IS *
 * PRODUCED AT CALENDAR QUARTER END. *
 * *****

RUN DATE: 04/15/77

PROVIDER SUMMARY PROFILE REPORT
FOR QUARTER ENDING MARCH 31, 1977
CATEGORY OF SERVICE: 04 CLASS GROUP: 01

MF19-01R PAGE 1

IDENTIFICATION SECTION
NAME: HOSPITAL A
NUMBER: 0099032H

COUNTY: 04
SIZE: 568 BEDS

TYPE: 01
SPECIALTY: 66

PSRO REGION
FORCED EXCLUSION: NO

REPORT ITEM/SECTION-TITLE	FOR SVC IN-		THIS QTR		FOR SERVICES RENDERED TO DATE AS OF		TREND	
	VALUE	DEV	VALUE	DEV	VALUE	DEV	VALUE	DEV

1 MASTER EXCEPTION CONTROL SECTION

01 TOTAL DOLLARS PAID	27553	0.6	13219	0.7	25631	0.6	31002	0.7	30324	0.7	22457	0.5	3.9	0.2
02 TOTAL NO OF RECIPIENTS SERVED	645	1.1	327	1.0	553	1.1	709	1.2	712	1.2	606	1.0	-2.5	0.8

3 RECIPIENT VOLUME SUMMARY SECTION

01 NO RECIPS - MEDICAID ONLY	552	1.0	259	0.8	455	1.0	632	1.2	615	1.2	507	0.9	-2.5	0.2
02 NO RECIPS - MEDICAID PRIMARY	104	0.8	69	1.0	108	0.8	92	0.6	107	0.7	112	0.9	-2.5	-0.1
03 PCT RECIPS AGE GROUP 00-12	43.01	-0.3	39.30	0.7	41.76	0.4	43.67	0.3	43.09	0.3	43.20	0.4	-0.8	0.1
04 PCT RECIPS AGE GROUP 13-20	13.17	-0.6	11.50	0.0	14.95	0.0	12.50	-0.4	11.54	-0.4	14.40	-0.2	1.9	0.2
05 PCT RECIPS AGE GROUP 21-49	33.91	-0.6	37.45	0.7	32.31	0.2	35.28	0.1	35.28	0.0	31.95	0.0	0.3	0.1
06 PCT RECIPS AGE GROUP 50-999	10.00	-0.5	11.58	0.0	11.43	0.0	8.54	-0.3	10.08	-0.2	10.45	-0.2	1.3	0.1
07 PCT RECIPS - MALE	34.59	-0.5	30.45	0.4	35.16	0.3	36.71	0.1	33.33	0.0	32.94	0.1	2.9	0.1
08 PCT RECIPS - DIAG GP 0000-1369	5.43	-0.1	6.10	0.1	6.01	0.1	3.16	-0.2	5.49	0.0	6.71	0.2	-3.9	0.0
09 PCT RECIPS - DIAG GP 1400-2399	2.22	-0.2	3.47	0.0	1.98	0.0	1.42	-0.1	2.20	-0.1	3.35	0.0	-22.0	-0.2
10 PCT RECIPS - DIAG GP 2400-2799	2.04	-0.6	2.32	-0.3	2.64	-0.3	1.90	-0.3	1.63	-0.6	2.17	-0.4	8.0	0.1
11 PCT RECIPS - DIAG GP 2800-2899	1.27	-0.3	1.54	-0.1	1.54	-0.2	0.95	-0.2	1.14	-0.2	1.50	-0.2	-2.3	0.0
12 PCT RECIPS - DIAG GP 2900-3199	2.17	-0.2	1.16	-0.3	2.64	-0.1	1.90	-0.1	2.40	0.0	1.50	-0.1	11.1	-0.1
13 PCT RECIPS - DIAG GP 3200-3699	5.75	-0.3	4.63	-0.2	5.93	-0.1	5.54	0.0	5.37	-0.1	6.31	-0.1	-1.6	-0.1
14 PCT RECIPS - DIAG GP 3700-4509	1.77	-0.3	3.47	0.3	2.42	-0.2	1.42	-0.2	1.14	-0.3	2.37	-0.2	2.3	0.1
15 PCT RECIPS - DIAG GP 4600-5199	21.37	-0.2	21.62	0.7	23.30	0.4	16.93	0.0	20.33	0.3	26.43	0.2	-5.0	0.0
16 PCT RECIPS - DIAG GP 5200-5799	5.66	-0.2	3.47	-0.2	6.59	0.0	5.05	-0.1	4.23	-0.2	6.31	-0.1	4.2	0.1
17 PCT RECIPS - DIAG GP 5800-6299	6.29	-0.3	5.41	0.0	5.49	-0.1	6.33	-0.2	6.50	0.0	6.71	0.1	-6.1	-0.3
18 PCT RECIPS - DIAG GP 6300-6799	1.45	-0.1	0.39	0.3	0.22	-0.5	0.79	-0.1	1.79	0.1	2.94	0.5	-64.0	-1.0
19 PCT RECIPS - DIAG GP 6800-7099	3.12	-0.2	2.32	0.0	2.42	-0.1	4.59	-0.1	3.09	-0.1	1.97	0.0	9.4	0.0
20 PCT RECIPS - DIAG GP 7100-7399	1.72	-0.1	1.16	-0.5	2.64	-0.1	1.27	-0.1	2.28	0.0	0.79	-0.3	26.0	0.1
21 PCT RECIPS - DIAG GP 7400-7599	0.10	-0.4	0.39	-0.1	0.00L	-0.4	0.32	-0.1	0.33	-0.1	0.00L	-0.4	-0.6	0.0
22 PCT RECIPS - DIAG GP 7600-7799	0.05	-0.4	0.00L	-0.2	0.00L	-0.3	0.00L	-0.3	0.16	-0.2	0.00L	-0.3	-60.0	-0.5
23 PCT RECIPS - DIAG GP 7800-7999	34.35	-0.6	16.99	0.2	13.19	-0.2	17.09	-0.1	13.66	-0.3	12.62	-0.4	3.2	0.3
24 PCT RECIPS - DIAG GP 8000-8999	25.12	-0.4	23.94	0.1	25.05	0.3	19.41	0.1	25.20	-0.2	19.72	0.0	8.1	0.2
25 PCT RECIPS - DIAG GP 9000-9100	15.21	-0.8	14.29	0.0	13.05	-0.3	16.77	-0.3	17.24	-0.4	12.03	-0.3	3.3	0.1

4 FINANCIAL SUMMARY SECTION

01 TOTAL AMOUNT CHARGED	27902	0.6	13232	0.7	25677	0.6	32015	0.7	30870	0.7	23040	0.5	3.2	0.2
02 AMT CHARGED-MEDICAID PRIMARY	21827	0.6	10153	0.4	10663	0.4	26270	0.7	23983	0.7	10307	0.5	1.4	0.2
03 AMT CHARGED-MEDICAID PRIMARY	6075	0.2	3080	0.6	7014	0.3	5730	0.1	6495	0.2	4653	0.1	9.7	0.1
04 PHS MEDICAID ONLY	21457	0.6	10140	0.6	10617	0.6	26065	0.8	23429	0.7	17802	0.5	2.3	0.2
05 PHS HI - PR PRIMARY	2403	0.4	1068	0.6	2408	0.7	1608	0.2	2361	0.3	3155	0.5	-12.1	0.1
06 PHS THIRD PARTY	225	0.0	0	-0.3	23	-0.2	112	-0.1	266	-0.1	502	0.2	-70.4	-0.9
07 AVG PAYMENT PER RECIPIENT	38.69	-0.2	-0.2	0.9	40.92	0.3	41.90	0.0	36.10	0.0	35.11	0.1	31.2	0.2

SEE PAGE 2 OF THIS REPORT FOR EXPLANATION.

RUN DATE: 04/15/77

PROVIDER SUMMARY PROFILE REPORT
FOR QUARTER ENDING MARCH 31, 1977
CATEGORY OF SERVICE: 04 CLASS GROUP: 01

MF19-01R PAGE 2

IDENTIFICATION SECTION
NAME: HOSPITAL A
NUMBER: 0099032N

COUNTY: 04	TYPE: 01	PSRO REGION:
SIZE: 560 BEDS	SPECIALTY: 66	FORCED EXCEPTION: NO
(1)	(1)	(1)

----- REPORT ITEM/SECTION -----	FOR SVC IN--	FOR SERVICES RENDERED TO DATE AS OF:	----- TREND --
TITLE	---AVG QTR---	---THIS QTR---	---1 QTR AGO-- --2 QTRS AGO-- --3 QTRS AGO-- --4 QTRS AGO-- -- RATE ---
	VALUE DEV	VALUE DEV	VALUE DEV VALUE DEV VALUE DEV VALUE DEV VALUE DEV

THE PROVIDER SUMMARY PROFILE REPORT HAS BEEN DESIGNED TO CONVEY #
A SUMMARY PICTURE COVERING A FIFTEEN MONTH TIME PERIOD OF THE #
UTILIZATION PATTERNS OF INDIVIDUAL MEDICAID PROVIDERS. THIS #
REPORT IS INTENDED TO SERVE AS THE PRIMARY SCREENING, OR CASE #
FINDING, FACILITY OFFERED BY THE SUR SUBSYSTEM. THIS REPORT IS #
PRODUCED QUARTERLY OR UPON REQUEST. #

RUN DATE: 04/15/77

PROVIDER EXCEPTION REVIEW INDEX
FOR QUARTER ENDING MARCH 31, 1977
CATEGORY OF SERVICE: 01

MF21-01R PAGE 1

RANK	HEIGHT	NUMBER	PROVIDER CLASS	NAME	DOLLARS PAID	RECIPIENTS SERVED	PROFILE PAGE NO	----AUDIT ---- DATE STATUS
01	4.064	00091411H	01	HOSPITAL-A	457,653	53	212	
02	2.705	00094074H	01	HOSPITAL-B	272,430	47	147	
03	2.062	00094523H	01	HOSPITAL-C	184,443	08	292	
04	1.929	00091544H	01	HOSPITAL-D	204,119	53	243	
05	1.886	00094841H	01	HOSPITAL-E	307,017	44	249	
06	1.848	00094004H	03	HOSPITAL-F	3,794,091	532	041	
07	1.767	00091449H	01	HOSPITAL-G	492,234	56	253	
08	1.763	00097604H	01	HOSPITAL-H	104,903	21	164	
09	1.510	00091194H	01	HOSPITAL-J	325,294	38	273	
10	1.506	00095025H	04	HOSPITAL-K	5,069,056	349	537	
11	1.150	00094905H	02	HOSPITAL-L	716,183	110	354	
12	1.045	00095037H	02	HOSPITAL-M	195,591	41	346	
13	1.031	00095022H	03	HOSPITAL-I	1,070,851	317	453	
14	1.023	00095038H	03	HOSPITAL-N	3,455,661	620	477	
15	1.022	00095146H	02	HOSPITAL-O	403,598	54	433	
16	954	00095147H	01	HOSPITAL-P	113,770	17	246	
17	909	00095036H	01	HOSPITAL-Q	252,765	47	128	
18	847	00095130H	01	HOSPITAL-R	34,098	11	237	
19	826	00095012H	02	HOSPITAL-S	260,308	40	335	
20	811	00095116H	02	HOSPITAL-T	255,094	59	415	
21	791	00095085H	02	HOSPITAL-U	432,369	79	305	
22	775	00095904H	01	HOSPITAL-W	64,308	11	260	
23	732	00095119H	02	HOSPITAL-Y	336,465	77	419	

THE PROVIDER EXCEPTION REVIEW INDEX LISTS EACH PROVIDER WHO WAS #
EXCEPTED AND SHOWS THE PAGE NUMBER OF THE SUTRIARY PROFILE REPORT #
WHERE HIS PROFILE MAY BE FOUND. IS ROUTINELY PRINTED AT THE #
SAME TIME AS THE PROVIDER SUTRIARY PROFILE REPORT. #

RUN DATE: 04/15/77

PHYSICIAN TREATMENT ANALYSIS CLASS PROFILES
FOR YEAR ENDING MARCH 31, 1977
CATEGORY OF SERVICE: 10 CLASS GROUP: 01

MF65-01R PAGE 1

REQUEST ID: 001

***** DIAGNOSIS SUMMARY *****

DIAGNOSIS CODE: GP001

AGE GROUP	SING OR MULT DX	NO. OF PROVIDERS	NO. OF RECIPS	--- PHYSICIAN TOTAL	PROCEDURES AVG/RECIP	--- DRUG TOTAL	PRESCRIPTIONS AVG/RECIP	--- INSTITUTIONAL DISCHARGES TOTAL
					NO. DIFF		NO. DIFF	AVG/RECIP
								AVG. LOS
-PROCEDURES-								
				CODE FREQ PCT.1	CODE FREQ PCT.1	CODE FREQ PCT.1	CODE FREQ PCT.1	CODE FREQ PCT.1
				6 0600 20,718 70.35	6 0601 5,972 30.31	6 7002 14,735 13.38	6 7001 1,569 13.02	6 0650 1,455 10.46
				6 0626 2,052 8.99	1 4005 2,246 0.37	6 0603 960 6.05	8 0726 1,257 5.66	6 0604 1,331 5.39
				6 0626 369 1.97	8 0917 336 1.63	8 0628 331 2.60	8 0557 261 2.40	1 8504 431 2.39
				1 8509 564 2.37	1 8501 497 2.03	8 0680 231 1.86	6 7505 192 1.68	1 8506 436 1.34
				5 0628 106 1.15	1 8505 175 1.10	6 3333 281 0.98	7 0100 91 0.94	7 0101 71 0.75
				1 8500 117 0.74	8 0661 104 0.66	8 0900 70 0.66	8 0675 55 0.60	8 0720 45 0.51
				1 8503 84 0.50	4 0610 51 0.42	1 8571 32 0.36	2 1897 31 0.35	8 0652 34 0.35
				8 0744 35 0.34	4 0627 39 0.33	8 0719 31 0.33	1 8502 44 0.32	8 0624 40 0.32
				2 0381 27 0.29	1 8508 30 0.28	8 0746 33 0.28	6 7003 138 0.27	8 0709 69 0.25
				8 0725 35 0.25	7 0304 28 0.22	8 0764 38 0.22	6 0609 28 0.20	1 4009 29 0.19
				6 0600 34 0.18	1 8516 44 0.16	8 0690 25 0.16	4 4617 70 0.09	6 0150 67 0.09
				8 0704 28 0.09	4 3515 30 0.08	6 4488 36 0.08	1 8528 54 0.07	1 9005 185 0.06
				8 0793 82 0.03				
--- DRUGS---								
				CODE CL FREQ PCT.1	CODE CL FREQ PCT.1	CODE CL FREQ PCT.1	CODE CL FREQ PCT.1	CODE CL FREQ PCT.1
				0000 2,191 10.51	9800 1,062 7.22	9900 907 6.26	2000 894 5.96	
				4000 614 4.72	0800 550 4.44	2400 539 3.65	0100 487 3.66	
				5500 469 3.28	6800 405 3.12	1200 318 2.37	0400 277 2.27	
				9700 298 2.32	8400 207 1.92	0800 265 1.63	4600 170 1.35	
				8600 158 1.18	5200 74 0.66	2000 69 0.52	4400 24 0.23	

***** DIAGNOSIS SUMMARY *****

DIAGNOSIS CODE: GP001

AGE GROUP	SING OR MULT DX	NO. OF PROVIDERS	NO. OF RECIPS	--- PHYSICIAN TOTAL	PROCEDURES AVG/RECIP	--- DRUG TOTAL	PRESCRIPTIONS AVG/RECIP	--- INSTITUTIONAL DISCHARGES TOTAL
					NO. DIFF		NO. DIFF	AVG/RECIP
								AVG. LOS
66-UP MULT DX 586								
				149 084	5.93	42 123	0.03	17 2,454
				0 2	0.05	0 0	0.08	0 4
				1 1	3.07	1 1	0.72	0 18
--AVERAGES--								
--STD DEVS--								
-PROCEDURES-								
				CODE FREQ PCT.1	CODE FREQ PCT.1	CODE FREQ PCT.1	CODE FREQ PCT.1	CODE FREQ PCT.1
				6 0600 125 47.45	4 0626 100 27.52	6 0601 68 24.16	8 0934 142 20.13	8 0726 78 12.06
				6 7002 167 10.74	4 0603 65 6.71			
---DRUGS---								
				CODE CL FREQ PCT.1	CODE CL FREQ PCT.1	CODE CL FREQ PCT.1	CODE CL FREQ PCT.1	CODE CL FREQ PCT.1
				0000 43 11.41	9800 16 4.70			

* THIS REPORT SHOWS TOTALS, AVERAGES AND STANDARD DEVIATIONS FOR *
* PHYSICIANS GROUPED INTO THE CLASS SHOWN AND SUBMITTED CLAIMS CON- *
* TAINING THE INDICATED DIAGNOSIS AND AGE GROUP DATA. THE PURPOSE *
* OF THE REPORT IS TO SHOW THE DATA USED TO ESTABLISH NORMS TO *
* EVALUATE PROVIDER PERFORMANCE. THIS REPORT IS PRODUCED *
* QUARTERLY. *

RUN DATE: 04/15/77

PHYSICIAN TREATMENT ANALYSIS REPORT
FOR YEAR ENDING MARCH 31, 1977
CATEGORY OF SERVICE: 10 CLASS GROUP: 26

MF69-01R PAGE 1
REQUEST ID. 001

IDENTIFICATION SECTION
NAME: JOHN DOE MD.
NUMBER: 000940330

COUNTY: 03
PRACTICE: 1

TYPE: 30
SPECIALTY: 26

PSRO REGION: 00

DIAGNOSIS SUMMARY

DIAGNOSIS CODE: GP001

AGE GROUP	SING OR MULT DX	NO. OF RECIPS	--- PHYSICIAN PROCEDURES ---			--- DRUG PRESCRIPTIONS ---			- INSTITUTIONAL DISCHARGES -		
			TOTAL	AVG/RECIP	NO.DIFF	TOTAL	AVG/RECIP	NO.DIFF	TOTAL	AVG/RECIP	AVG.LOS
00-19	MULT DX	0	0	0.00	0	0	0.00	0	1	0.00	29.00
00-19	SING DX	3	43	14.33	4	0	0.00	0	4	1.33*	40.50
20-40	MULT DX	1	0	0.00	2	0	0.00	0	16	16.00*	44.19
20-40	SING DX	4	53	13.25	3	13	3.25*	5	17	4.25*	50.35
41-65	MULT DX	0	0	0.00	0	0	0.00	0	5	0.00	20.60
41-65	SING DX	6	173	28.83	4	0	0.00	0	4	0.67	323.75*
66-999	SING DX	0	0	0.0	0	3	0.00	2	0	0.00	0.00

PROCEDURE CODES

DIAGNOSIS CODE: GP001

AGE GROUP	SING OR MULT DX	CODE	FREQ.	PCT.	CODE	FREQ.	PCT.	CODE	FREQ.	PCT.	CODE	FREQ.	PCT.	CODE	FREQ.	PCT.
00-19	SING DX	6 9001	3	100.00	6 9002	31	100.00	6 0153	4	66.67	6 0151	5	33.33			
20-40	MULT DX	6 9001	1	100.00	6 9002	7	100.00									
20-40	SING DX	6 9001	3	75.00	6 9002	35	75.00	6 0151	15	50.00						
41-65	SING DX	6 9001	6	100.00	6 9002	144	100.00	6 0151	15	50.00	6 0153	0	33.33			

DRUG CODES

DIAGNOSIS CODE: GP001

AGE GROUP	SING OR MULT DX	CLE	FREQ	PCT.	CL	FREQ	PCT.	CL	FREQ	PCT.	CL	FREQ	PCT.	CL	FREQ	PCT.
20-40	SING DX	0000	3	25.00	1200	1	25.00	2000	6	25.00	5000	1	25.00	9000	2	25.00

* SEE PAGE 2 OF THIS REPORT FOR EXPLANATION. *

RUN DATE: 04/15/77

PHYSICIAN TREATMENT ANALYSIS REPORT
FOR YEAR ENDING MARCH 31, 1977
CATEGORY OF SERVICE: 10 CLASS GROUP: 26

MF69-01R PAGE 2

REQUEST ID. 001

IDENTIFICATION SECTION

NAME: JOHN DOE MD.
NUMBER: 000940330

COUNTY: 03
PRACTICE: 1

TYPE: 30
SPECIALTY: 26

PSD REGION: 00

***** DIAGNOSIS SUMMARY *****

DIAGNOSIS CODE: 6P001

AGE	SEX OR	NO. OF	--- PHYSICIAN PROCEDURES ---			--- DRUG PRESCRIPTIONS ---			--- INSTITUTIONAL DISCHARGES ---		
GROUP	MULT	RECIP	TOTAL	AVG/RECIP	NO. DIFF	TOTAL	AVG/RECIP	NO. DIFF	TOTAL	AVG/RECIP	AVG. LOS

B-28

THE PHYSICIAN TREATMENT ANALYSIS REPORT HAS BEEN DESIGNED TO PRESENT A STATISTICAL PROFILE OF TREATMENT RENDERED BY INDIVIDUAL PHYSICIANS IN RESPONSE TO INDIVIDUAL DIAGNOSIS. THIS REPORT IS INTENDED TO SERVE AS THE SCREENING MECHANISM BY WHICH DIAGNOSIS-TREATMENT INTERRELATIONSHIPS WHICH DEVIATE FROM A PREDETERMINED NORM ARE REPORTED. IT MAY ALSO BE USED TO SUPPORT THE INVESTIGATIONS OF MISUTILIZATION AS INDICATED BY THE SUMMARY PROFILE REPORTS. THIS REPORT IS PRODUCED QUARTERLY OR UPON REQUEST.

RUN DATE: 04/15/77

PHYSICIAN EXCEPTIONAL TREATMENT PATTERNS
FOR YEAR ENDING MARCH 31, 1977

MF69-03R PAGE 1

IDENTIFICATION SECTION
NAME:
NUMBER: 00940146H

COUNTY: 47
SIZE: 0 BEDS

TYPE: 01
PSRO REGION: 00

CATEGORY OF SERVICE: 01
CLASS GROUP: 00

REQUEST ID: 002

TOTAL PHYSICIANS: 45

PHYSICIAN-- NUMBER--	--RAIK-- LOS ANC		--DISCHARGE-- TOTAL PCT.		LENGTH OF STAY DATA						ANCILLARY CHARGE DATA									
					AVG LOS	EXCPT DISCH	PCT EXCPT	DAYS	X 1-2 LOS	AVG/ DAY	AVERAGE/DISCHARGE									
											TOTAL	SUPP	XRAY	LAB	DRUG	PHYS	SPCH	INIA	MISC	
30507	39	34	1	00.5	2.0	0	0.0	0	0.0	261.5	253	109	20	104	40	0	0	17	145	
30526	43	27	1	00.5	1.0	1	100.0	1	0.0	641.0	641	320	28	63	30	0	0	0	200	
30530	26	21	22	12.3	5.3	5	22.0	9	22.7	177.6	952	245	72	214	197	0	0	60	160	
30571	14	14	2	01.1	8.0	0	0.0	0	0.0	165.3	1322	313	20	394	329	0	0	36	220	
30592	18	15	3	01.6	7.0	0	0.0	0	33.3	102.7	1279	303	20	307	135	0	0	11	413	
30597	9	3	1	00.5	14.0	1	100.0	16	42.8	106.1	449	106	99	112	32	2	0	40	55	
30599	30	45	2	01.1	2.5	1	50.0	0	0.0	440.7	6202	1413	1114	1759	559	0	0	1053	304	
30611	23	18	5	02.0	6.4	2	40.0	1	50.0	63.2	150	34	0	95	20	0	0	0	0	
30614	6	19	4	02.2	21.0	2	50.0	8	0.0	162.7	1041	367	140	98	212	23	0	13	106	
30617	14	20	1	00.5	8.0	1	100.0	37	0.0	40.4	1017	157	93	307	180	0	0	91	106	
30628	27	30	3	01.6	5.0	2	66.0	2	0.0	77.3	618	108	20	83	34	0	0	0	285	
30642	7	7	1	00.5	20.0	0	0.0	2	33.3	110.8	594	24	103	203	73	0	0	91	20	
30649	33	40	20	15.7	3.8	8	20.0	0	0.0	98.9	1978	134	261	367	669	0	0	522	25	
30655	39	39	1	00.5	2.0	0	0.0	20	46.4	91.7	353	94	63	137	57	0	0	32	7	
30661	35	42	1	00.5	3.0	1	100.0	0	0.0	105.5	371	142	28	45	11	0	0	0	145	
30664	29	43	1	00.5	4.0	0	0.0	3	0.0	84.0	252	19	20	123	57	0	0	25	0	
30688	11	16	2	01.1	10.0	1	50.0	0	0.0	49.5	198	29	60	0	8	0	0	0	101	
30691	39	32	1	00.5	2.0	0	0.0	3	0.0	270.0	556	261	20	03	22	0	0	17	245	
30699	0	1	1	00.5	17.0	1	100.0	4	0.0	622.6	10585	2731	564	2772	1050	0	0	702	2010	
30712	1	2	1	00.5	68.0	1	100.0	55	0.0	110.0	7478	2513	404	1330	1526	142	0	393	1090	

*
* SEE PAGE 2 OF THIS REPORT FOR EXPLANATION.
*

B-9



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